TÁNCZOS ORSOLYA

CAUSATIVE CONSTRUCTIONS AND THEIR SYNTACTIC ANALYSIS IN THE UDMURT LANGUAGE
(MŰVELTETŐ SZERKEZETEK ÉS MONDATTANI ELEMZÉSÜK AZ UDMURT NYELVBEN)

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ABBREVIATIONS

√ = Root

ABL = Ablative Case

ACC = Accusative Case

(ACC) = Unmarked Accusative Case

ADV = Adverb

AP = Adjective Phrase

AUX = Auxiliary

CAUS(E) = Causative Suffix/Verb

COND = Conditional

CONJ = Conjunction

CONV = Converb

DAT = Dative Case

DEF = Definite

DET = Determinetor

DP = Determiner Phrase

EP = Epistemic Vowel

EX = Existential verb

FREQ = Frequentative Suffix

FUT = Future Tense

GEN = Generative Case

INCH = Inchoative verb

INE(SS) = Inessive Case

INF = Infinitive

INST = Instrument Case

NCAUS = Non-causative Suffix/Verb

NEG = Negative

NFIN = Non-finite

NOM = Nominative Case

NOMIN = Nominalizer

NP = Noun Phrase

OBL = Oblique Case

-ÓD = ÓD suffix

PART = Partitive Case

PASS = Passive Suffix

PERF = Perfective Tense

PL = Plural

POSS = Possessive

PP = Prepositional Phrase

PRS = Present Tense

PRT = Participle

PST/PAST = Past Tense

PTC = Particle

PX = Possessive Suffix

REFL = Reflexive Suffix

RX = Relational Suffix

SG = Singular

TRS = Translative Case

V = Verbalizer

VP = Verbal Phrase

CHAPTER 1

Introduction

1.1 The aim of the dissertation

The aim of the present work is to investigate causative constructions in the Udmurt language within the framework of the Minimalist Program and Distributed Morphology. Recent years have seen a growing interest in the nature of the morphology-syntax interface. This thesis aims to contribute to the discussion of how morphology and syntax interact. The dissertation will present empirical evidence for the claims that i) word-formation is part of syntax, and ii) causative constructions should be treated uniformly.

The dissertation investigates causative constructions containing lexical (or synthetic) and syntactic (or productive) causatives, periphrastic causative constructions and their word-formation properties, as well as the internal structure and argument structure of causatives.

My aim with this dissertation is to present an account of causative constructions in the Udmurt language based on Miyagawa's (1998) *The same-component hypothesis* for Japanese. This theory claims that all verbs that have the meaning component CAUSE are formed in the same component of the grammar. I adopt this claim in the present study, arguing that this component of the grammar in Udmurt, similarly to Miyagawa's (1998) account for Japanese causatives, is the syntax.

Causatives and their lexical and syntactic properties have been in the center of linguistic studies in different fields of linguistics (e.g. Typology, Theoretical Linguistics, Language Acquisition) for the last decades. The traditional treatment of causatives goes back to the seminal work of Shibatani (1973). In this proposal synthetic causatives are formed in the lexicon, while analytical causatives are formed in syntax. The syntactic differences between the two kinds of causatives can be traced back to their origin. This traditional treatment is at the heart of *Lexical Functional Grammar*[1] approaches to causatives, where the causative morpheme can be seen as a RELATOR not just between the causer and the causee, but also between the causing event and the basic event, and it functions as a three-place predicate:

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[1] For a detailed description of Lexical Functional Grammar see Bresnan (2001).

CAUSER<ag pt PRED> (cf. Alsina 1992, 1996). In these approaches lexical and synthetic causatives belong to different levels of the grammar.

Contrary to this dual account, nowadays causatives are treated as a phenomenon on the morphology/syntax interface and the central problem is to account for the difference between the so-called synthetic versus analytical causatives in a unified account (cf. Baglini 2012).

Lexicalist approaches to the syntax-lexicon interface follow the idea of the *Strong Lexicalist Hypothesis* (cf. Pullum and Zwicky 1992), which assumes that the lexicon is an active lexicon, and due to the *Lexicon-Syntax Parameter,* thematic arity operations may appear both in the syntax and in the lexicon (e.g. Reinhart 2002; Reinhart and Siloni 2005). However, these operations can never manipulate the theta-grids of the verb (*The lexicon interface guideline*). This means that the causative operation, which is certainly a thematic arity operation (it modifies the theta-grid of the basic verb: the original agent becomes the patient, and a new external argument functions as the agent of the predicate), can only appear in the lexicon.

By contrast, accounts couched in *Distributed Morphology* (Halle & Marantz 1993, 1994) treat lexical and syntactic causatives uniformly and propose that word-formation takes place in syntax, while the narrow lexicon only stores roots and inflectional as well as derivational elements. In the present dissertation I follow this latter syntactic analysis of causative constructions based on Pylkkänen's (2002, 2008) approach to causatives.

Turning back to the narrow topic of the dissertation, I believe that causativization in Udmurt is interesting not just because of its own syntactic properties, but also because via the question of argument structure and causative operation, lots of other issues and problems have arisen and needed to be solved (e.g. verb types, finite and non-finite structures, small clauses, etc.). However, it is important to note that a lot of these questions are just partly solved or handled in this work. I would like to consider this thesis as a starting point for a deeper and more detailed examination of the syntactic properties of the Udmurt language, and I hope that many linguists will critically review and revise my solutions and analyses, keeping Udmurt in the flow of international linguistic discussions.

The rest of the Introduction Chapter is structured as follows: in section 1.2, I give information on the Udmurt data, on the data collecting methods and on the style of the examples in the course of the thesis. This will be followed by the most relevant grammatical properties of the Udmurt language in section 1.3. Following this introduction to Udmurt, I turn to the theoretical frameworks that this study adopts (section 1.4), the basic typological classification of causative constructions (section 1.5), and the causative terminology used

throughout the dissertation (section 1.6). The Introduction Chapter ends with the outline of the dissertation (section 1.7).

1.2 The Udmurt data of the dissertation

In this section I give an overview of the linguistic data collected from the Udmurt language for the present work.

It is a well-known fact that from a syntactic perspective, Udmurt is an under-studied language; even descriptive syntactic works are rare. However, more and more theoretical and typological studies have been published in recent years that consider narrower or wider topics of Udmurt syntax (e.g. Edygarova 2009, 2010 on possessive case in Udmurt and Edygarova 2015 on negation; Asztalos 2010 on passive constructions; Georgieva 2012 on non-finite subordination; F. Gulyás 2013 and F. Gulyás & Speshilova 2014 on impersonal constructions; and Horváth 2013 on aspect markers, among others).

When detailed syntactic descriptive works are lacking, syntacticians' aim is always twofold: i) to collect relevant data with the help of surveys and questionnaires and ii) to analyze this collected material. This work has also been written in accordance with this double aim.

1.2.1 *Acceptability judgments*

Transformational generative grammar proposes a distinction between Internal language (or I-Language) and External Language (or E-language) (cf. Chomsky 1986). Chomsky (1986) argues that only I-language can be the subject of linguistic theories. E-language is epiphenomenal; it is the result of I-Language.[2] An E-language of a community could also be defined as the overlap of the individual I-languages of a population. The only way to study I-language is via E-language.

The question of grammaticality seems to be problematic when a group of informants need to judge the same set of sentences, because judgements often vary. Linguists agree that instead of a coarse-grained grammaticality scale it is better to use a fine-grained scale. The

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[2]   However, the necessity of a strict differentiation between I- and E-language has been called into question by linguists like Kolb (1997) and Sternefeld (2001). Kolb (1997) and Sternefeld (2001) argue that considering I-language as a 'computational system' does not allow it to be distinguished from E-language as a 'processing system', because both are interpreted as 'generative, procedural systems'. Instead of this traditional sense, competence should be understood as a 'declarative axiomatic system' and performance as the store of 'derivational, computational procedures', 'psychological restrictions' and all the components which have an effect on the behavior of the speakers (Vogel 2006).

grammaticality boundary is individually defined by the linguist; this boundary is located between the maximal and the minimal values of the scale. With this point defined, the multi-valued scale can easily be divided into a 'grammatical' and an 'ungrammatical' part (Vogel 2006).

1.2.2 *Data collecting method*

The data in the dissertation come from two sources. The first and larger group is made up by my collection during fieldworks (in three distinct periods between 2012 and 2013). My informants are all Udmurt-dominant native speakers living in the territory of the Udmurt Republic and their age ranges from 20 to 50. All the example sentences presented here are based on their judgments.

The judgments were collected in a written form. The native-speakers got sentences and they had to rate the sentences with numbers between 1-5, where 1 stood for 'ungrammatical' and 5 stood for 'correct'.[3] These kinds of multi-valued scales resulted in the so-called gradient acceptability (cf. Vogel 2006). The sentences were presented in minimal pairs, such as in (1a-b), and with the five-point scale I got statistically significant results, where significantly fewer sentences were judged as 'acceptable' than 'ungrammatical'.

(1) a. *Sasha*   *Mashajez*   *knigajez*   *lydzytiz.*   'grammatical'

     Саша   Машаез   книгаез   лыдӟытӥз.

     Sasha.NOM Masha.ACC   book.ACC   read.CAUS.PST.3SG[4]

     'Sasha made Masha read the book.'

    b. **Sasha*   *Masha*   *knigajez*   *lydzytiz.*   'ungrammatical'

     Саша   Маша   книгаез   лыдӟытӥз.

     Sasha.NOM Masha.NOM/(ACC)   book.ACC   read.CAUS.PST.3SG

     'Sasha made Masha read the book.'

The examples without citing the source come from my fieldwork.

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[3]   The informants got the following instructions in Udmurt, illustrated with an example:
    "Please mark the following sentences with a number from 1 to 5 where:
    1 – it is not correct, not understandable
    5 – it is correct, I would say it like this
    2-3-4 - the sentence would be judged differently - it may be correct or incorrect"
[4]   The list of abbreviations used in the dissertation is given on pages 10-11.

The second group of the examples comes from descriptive grammars of the Udmurt language; here the main sources of the data are two works of Winkler (2001, 2011).

1.2.3 *The examples*

The Udmurt examples are given in four lines:[5]

(2) *Example sentence in Latin transcription*

Example sentence in Cyrillic[6]

gloss[7]

'English translation'

Throughout the dissertation, in the transcription both of the Udmurt and the Russian examples, I follow the *British Standard* (Oxford Style Manual 2003).

1.3 The Udmurt language[8]

Udmurt is a minority language from the Permic branch of the Uralic language family, spoken in the Volga-Kama Region of the Russian Federation. The closest related languages are the Komi and the Komi-Permyak languages.

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[5] I diverge from this four-line example-style only when I cite examples from somebody else's work, because in these cases I have kept the original example-style and also the original transcriptions. In some cases I skip one of the lines (the glossing or the original Cyrillic) because it is not relevant in the context.

[6] I consider it important to have all the examples in Cyrillic for two reasons: 1. The national writing system is Cyrillic in Udmurtia, 2: the Latin transcription is problematic in some cases.

[7] For glossing, I follow the *Leipzig Glossing Rules*.

[8] In this section I provide the reader with a brief background on the Udmurt language, only concentrating on the relevant grammatical questions. It can be skipped by those who are familiar with the grammar of Udmurt.
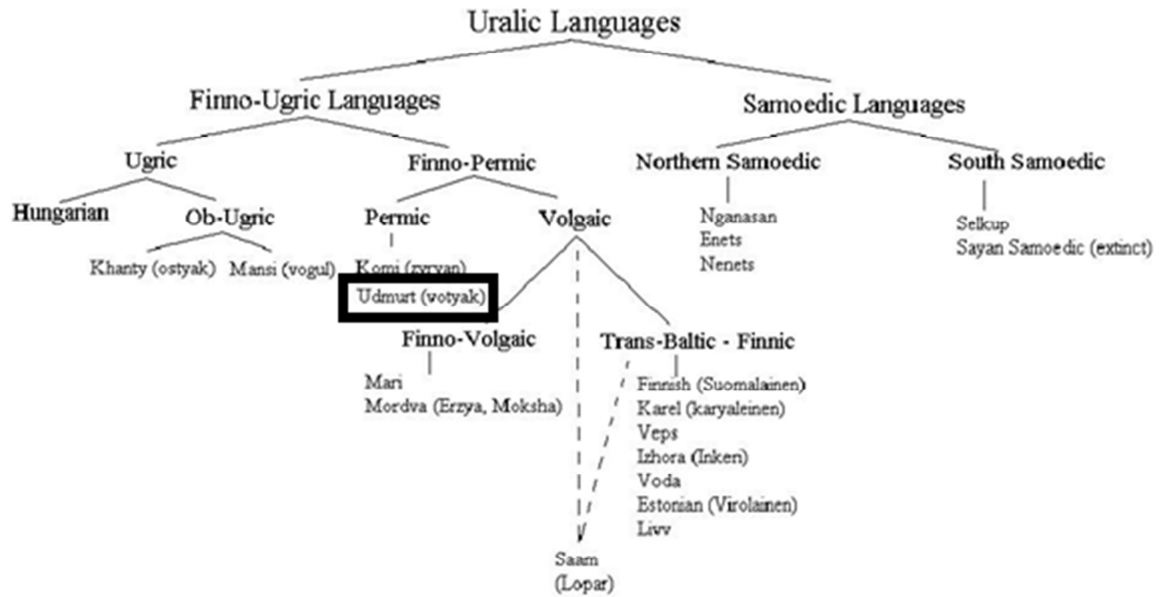
Picture 1: *Uralic language family* (Udmurt is marked with a square)[9]

Picture 2: *Location of the Udmurt Republic* (marked with the darker spot)[10]

According to the 2010 census the number of native speakers is 552 299 and the Udmurt population became bilingual in the 20th century (Salánki 2007). Language contact with the

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[9]   The language tree is from:
http://www.policy.hu/filtchenko/Documenting%20Eastern%20Khanty/Eastern%20Khanty%20Map.htm
[10]   The map is from https://hu.wikipedia.org/wiki/Udmurtf%C3%B6ld

Russian language began in the 12th-13th centuries, but the connection became stronger during the Soviet Era and today interferences appear at all linguistic levels (Salánki 2007).

In addition to the Russian language, Udmurt has a permanent contact with the other Uralic languages such as Mari, Komi and Turkic languages such as Bashkir and Tatar.

While the language has an official status in the Republic, it is the second official language of the Udmurt Republic declared by the Constitution in 1994, the use of the language is limited both in the official and public spheres; Udmurt is mostly used in domestic spheres (Speshilova 2008).

Despite these facts, we can see the revitalization of the language due to the Internet. Udmurt has a very lively community – mainly from the young generation – who use their language in the virtual sphere. This virtual world means blogs, public media, online websites. For instance, Udmurt is one of the small Finno-Ugric languages that have a Wikipedia in their own language.[11]

1.3.1   *Characteristics of Udmurt*

In this section I will present the main characteristics of the Udmurt language. I will focus on those properties which are relevant for the dissertation. Understanding the main syntactic properties like basic word order and the nature of subordination and negation will help the reader follow the examples through this work. The sub-section about morphology contains only the basic morphological rules, e.g. the order of the affixes and the one-to-one correspondence rules between function and form.

1.3.1.1   Main syntactic properties

In the descriptive literature Udmurt is considered to be an SOV language (see Vilkuna 1998, Winkler 2001, 2011, Timerkhanova 2011). The word order of the language is not strict, however, as it can be affected, for instance, by the information structure of the sentence (see Tánczos 2011, Asztalos 2012).

Recent studies on the basic word order (see Asztalos & Tánczos 2014), complementizers (see Tánczos 2013b, 2015) and relative clauses (see Dékány & Tánczos 2015) show that there is an ongoing parameter change from OV to VO in today's language. This is probably due to the influence of the Russian language, which is a head-initial language (see Baylin 2012).

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[11]

https://udm.wikipedia.org/wiki/%D0%9A%D1%83%D1%82%D1%81%D0%BA%D0%BE%D0%BD_%D0%B1%D0%B0%D0%BC

It is well-known from the typological literature that the OV-VO parameter is a predictor of other word order correlations (table from Croft 2003: 72; see also Greeberg 1963, Lehman 1973, Vennemann 1974, Hawkins 1983, Dryer 1992):

	OV	**VO**			**OV**	**VO**
Clausal orders	SV	VS	Phrasal orders	Post	Prep
	Vaux	AuxV		GN	NG
	VAdv	AdvV		RelN	NRel
	VSubr	SubrV		AN	NA
	PurpV	Vpurp		DemN	NDem
	OcompV	VOcomp		NumN	NNum
	SentQ	Qsent		AdvA	AAdv

Table 1: *Word order correlations*

Testing the basic word order in Udmurt, we found that in today's language both the SOV and the SVO orders, presented in examples (3a) and (3b), can function as the basic word order. There is no semantic or pragmatic difference between the two sentences; both can be understood as a non-derived word order (see Asztalos & Tánczos 2014).

(3) a. *Sasha*   *kniga*   *lydziz.*
    Саша   книга   лыдӟиз.
    Sasha.NOM   book.(ACC)   read.PST.3SG
    'Sasha read a book.'

  b. *Sasha*   *lydziz*   *kniga.*
    Саша   лыдӟиз   книга.
    Sasha.NOM   read.PST.3SG   book.(ACC)
    'Sasha read a book.'

This shows that due to the OV-VO parameter change the basic word order has been shifting from SOV to SVO and in today's Udmurt two competing strategies can be observed. The grammaticality judgment tests aiming to find out the basic word order of the language show that the use of the SOV or SVO order is influenced by the preference of the speaker. Russian-

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dominant native speakers use the SVO order more frequently than Udmurt-dominant or 'purist' native speakers.

Within the clausal domain, the original head-final property is present in the order of the auxiliary and the finite verb (4).

(4) *Sasha*   *kniga*   *lydze*   *val*.
     Саша   книга   лыдӟе   вал
     Sasha.NOM   book.(ACC)   read.PST.3SG   was
     'Sasha has been reading a book.'

It is clear that the head-final to head-first parametric change has not reached verb-auxiliary constructions deeply: of the auxiliaries, only *bygatyny* 'can' can precede the verb.

(5) a. *Koťkud aďamily*   *mi*   *[bygatiśkom   śotyny] 30 talon   toleźaz.*
        every   man.DAT   we   can.PRS.1PL   give.INF 30 coupon month.DET.ILL
        'We can give 30 coupons per month to everybody.'
     b. *Vań   arťistjos og-ogzes   užazy   [voštyny   bygato]*.
        every artist.PL   each_other.3PL.POSS.ACC job.ILL.3PL.POSS substitute.INF can.PRS.3PL
        'All of the artists can substitute for each other.'

                                                                   (Asztalos & Tánczos 2014)

As for phrasal orders in Udmurt, the head-final property seems to be very strict. The language prefers postpositions instead of prepositions (6a), adjectives always precede the noun (6b), and so do numerals (6c) and possessors (6d).

(6) a. *Sasha*   *[korka   doryn]*   *syle.*
        Саша   корка   дорын   сылэ.
        Sasha.NOM house.NOM   at   stand.PRS.3SG
        'Sasha is standing at the house.'

     b. *Sasha*   *gord mashina*   **gord   bashtiz.*
        Саша   горд машина   горд   басьтиз.
        Sasha.NOM   red car.(ACC)   red   buy.PST.3SG
        'Sasha bought a red car.'

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c. *Sasha*   *kyk*   *mashina*   ** kyk*   *bashtiz.*

Саша   кык   машина   кык   басьтиз.

Sasha.NOM   two   car.(ACC)   two   buy.PST.3SG

'Sasha bought two cars.'

d. *Sashalen*   *mashinajez*   **Sashalen*   *uramyn*   *syle*

Сашалэн   машинаез   Сашалэн   урамын   сылэ

Sasha.GEN   car.3SG   Sasha.GEN   street.INESS   stand.PST.3SG

'Sasha's car stands on the street.'

There is one parameter in the phrasal orders, however, where the OV-VO change appears very clearly: the RelN/NRel parameter.[12] In Udmurt – similarly to the other Uralic languages – the original relative clause is prenominal and non-finite and there is no relative complementizer or relative pronoun in the clause (7).

(7)   *Sasha*   [*pes'atajen*   *puktem*] *korkan*   *kyk*   *ar*   *ule*   *in'i*

        Sasha.NOM grandfather.INSTR   built.PRT house.INESS   two   year   live.PRS.3SG already

        'Sasha has been living in the house that was built by his grandfather for two years.'

                                       (Dékány & Tánczos 2015)

But in the contemporary language the finite, postnominal relative clause also appears, following the Russian pattern. In these clauses the overt relativizer is obligatory (8).

(8)   *veras'ki*   *todmo-jenym*   [*kudiz*   *jarat-e/jarat-i*   *kochysh-jos-ty*]

        talk.PST.1SG   friend-1SG.INESS   REL.NOM like-PRS.3SG/ like-PST.3SG cat-PL-ACC

        'I talked to my friend who likes/liked cats.'

                                         (Dékány & Tánczos 2015)

It is proposed that this shift from the prenominal, non-finite to post-nominal finite relative clauses can appear in the language because finite subordination is already in the language (see Dékány & Tánczos 2015).

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[12] For a detailed analysis of the development of relative clauses in Udmurt and also in Khanty, see Dékány & Tánczos (2015).

Subordination in today's Udmurt can be both finite and non-finite. Winkler (2001) divides subordinate clauses into three types: "a) those with a finite verb and a subordinative conjunction resp. relative pronoun, b) those with a finite verb and without a subordinative conjunction resp. relative pronoun, c) those with an infinite verbal form and without a conjunction" (Winkler 2001:73).

Finite subordination is definitely a new development in the language, since it is well-known from the Finno-Ugric literature that Proto-Uralic did not have either finite subordinations or complementizers. On the one hand, the appearance of these constructions is connected to the strong influence of the Russian language on Udmurt. On the other hand, it also seems to be connected to the OV-VO parametric change in the language and the evolution of the left periphery of subordinate sentences.

Based on their origin, complementizers can be divided into three different groups: a) those which are borrowed from Russian (e.g. *shto* 'that'), b) those which developed from an Udmurt postposition (e.g. *bere* 'after') and c) those which developed from an Udmurt verb (e.g. *shuysa* 'that'). As for their position, the complementizers that developed from Udmurt postpositions or verbs can appear in two positions in the clause (see examples 9a-b): at the beginning of the clause (e.g. *maly ke shuono* 'because') or at the end of the clause (e.g. *shuysa* 'that' or *ke* 'if'). Borrowed complementizers always appear at the beginning of the clause, following the syntactic properties of the Russian language (9c).[13]

(9)   a. *Mon*   *finn*   *kylly*   *dyshetskisko,*   ***maly ke shuono*** *chukaze*
         Мон   финн   кыллы   дышетскисько   малы ке шуоно ӵуказе
         1SG   Finnish   language.DAT   learn.PRS.1SG   because   tomorrow

         ekzamen   *luoz.*
         экзамен   луоз
         test.INST   be.FUT.3SG

         'I am studying Finnish because there will be an exam tomorrow.'

---

[13]   There is an interesting complementizer doubling going on in the language as well. In these constructions both the original and the Russian complementizer appear in the clause, the Russian one at the beginning of the clause, following the Russian rules, and the Udmurt one at the end of the clause, following the Udmurt syntactic rules (for a detailed discussion of this topic see Tánczos 2013b):

i. *Mon*   *malpas'ko,*   *čto*   *ton*   *bertod*   *šuisa.*
    I.NOM   think.PRS.1SG   that (Ru) 2SG   come_home.FUT.2SG   that (Ud)
    'I think you will come home.'

<div align="right">(Tánczos 2013b:5)</div>

b. *Mon   finn   kylly   dyshetskysal,   chukaze*

Мон   финн   кыллы   дышетскысал   ӵукезэ

1SG   Finnish language.DAT learn.COND.PRS.1SG   tomorrow

*ekzamen   luoz   **ke**.*

экзамен   луоз   ке

test.INST   be.FUT.3SG if

'I would learn Finnish if there was an exam tomorrow.'

c. *Mon   malpasko,   **shto** ton   bertod.*

Мон   малпасько,   что тон   бертод.

1SG   think.PRS.1SG   that 2SG   come.home.FUT.2SG

'I think you will come home.'

Word order in the embedded clause is similar to that in the simple clause, thus the basic word order can be either SOV or SVO, depending on the preference of the speaker.

In Udmurt, there are at least 10 different nonfinite forms (Winkler 2001, 2011, Georgieva 2012). This rich nonfinite morphology is a common property of the Uralic languages. Nonfinite subordination is preferred to finite subordination even in those languages in which finite subordinators have already appeared due to Russian influence (Tánczos 2013a).

What is common to the nonfinite verbs of Udmurt is that they lack tense morphology. They differ regarding the agreement features, however, since gerunds (and their negative form as well) bear agreement, while infinitives and participles do not.[14] This is illustrated in Table 2 where only those nonfinites are set in boldface that are able to bear agreement:[15]

Infinitive	Participles	Gerunds[16]
-ny	present/progressive/active: *-ś-*(assertive) *-śtem-* (negative)	mood-, tense- and state adverbs: *-sa* (assertive)*/-tek* (negative)
	perfect/past/passive or active:	simultaneity:

---

[14] I thank Ekaterina Georgieva for discussions on agreement with non-finites in Udmurt and the data in Table 2.

[15] Traditionally non-finite agreement is called possessive suffix.

[16] The termonolgy 'gerund' is used differently in Finno-Ugric studies and in theoretical linguistics. In the rest of the thesis I follow the terminology of theoretical linguistics and call these verb forms participles or converbs.

	-*(e)m-* (assertive)/*-mte-* (negative)	-*ku-*
		Temporal limitation: *-toź-*
	future/perfect?/passive: *-(o)no* (assertive)/*-(o)ntem* (negative)	obligation: *-(o)no*
	potential: *-mon* (assertive)/*-montem* (negative)	potential: **-mon** (assertive)/*-montem* (negative)
	perfect/resultative passive: *-(e)myn* (assertive)/*-mte/-(e)myn övöl* (negative)	causative: **-(e)myś-** (assertive)/*-mteyś-* (negative); **-(e)men-** (assertive)/*-mteen-* (negative)

Table 2: *The System of the nonfinite verbs in Udmurt* (Georgieva 2012: Table 1)

As Georgieva (2012) argues, nonfinite verbs in adverbial and temporal clauses bear agreement features and they can agree either with the subject of the matrix clause or with the subject of the embedded clause:

(10) a. [*Berty-tozh-am*]   *mon*   *Sasha-jez*   *tros*   *gine*   *adzhy-l-i*   *ńi.*
        берты-тоз-ям   мон   Саша-ез   трос   гинэ   адӟы-л-й   ни
        come.back-NFIN-1SG   1SG   they-ACC   many   only   see-FREQ-PST.1SG   already
        'While I was coming home, I saw Sahsa many times.'

    b. [*So*   *berty-tozh-az*]   *tort-ez*   *mon*   *ug*   *jötylys'ky.*
        co   берты-тоз-яз   торт-эз   мон   уг   йӧтылыськы
        he.NOM   come.back-NFIN-3SG   cake-ACC   nobody   NEG.PRS.1   touch.SG
        'I do not touch the ribbon until he comes back.'

If there is no agreement on the non-finite then the sentence has a null subject with arbitrary reference (Georgieva 2012).[17]

---

[17] I thank Ekaterina Georgieva for the examples in (11).

(11) a. [*Gozhja-ku*]   *predlozheni-len*   *pum-az*   *tochka*   *pukt-o.*
         write-NFIN   sentence-GEN   end-3SG.INESS   fullstop.(ACC) put-PRS.3PL
         'When writing, one puts a fullstop at the end of the sentence.'

     b.   [*Gozhja-ku-zy*]   *predlozheni-len*   *pum-az*   *tochka*   *pukt-o.*
         write-NFIN-3PL   sentence-GEN   end-3SG.INESS   fullstop.(ACC) put-PRS.3PL
         'When writing, they put a fullstop at the end of the sentence.'

Negation in Udmurt can be expressed in three different structures: a) with a negative verb, b) with a negative suffix and c) with negative particles (Edygarova 2015).

In standard negation (for a definition see Miestamo 2005) a negative verb is used. In these negative constructions the negative verb agrees with the subject in person and the main verb agrees with it in number (12).

(12) a. *Mon*   *shkolaje*   *u-g*   *myni-s'k-y*
         Мон   школае   у-г   мынӥ-ськ-ы.
         1SG   school.ILL   NEG-1   go-PRS-SG
         'I do not go to school.'

     b. *Mi*   *shkolaje*   *u-m*   *myni-s'k-e*
         Ми   школае   у-м   мынӥ-ськ-е.
         1PL   school.ILL   NEG-1   go-PRS-PL
         'We do not go to school.'

In addition, the negative verb indicates tense, since there are two negative verb forms: *u-* is used in the present and future and *ö-* is used in the past (13a-c).[18]

(13) a. *Mon*   *shkolaje*   *u-g*   *myni-s'k-y*
         Мон   школае   у-г   мынӥ-ськ-ы.
         1SG   school.ILL   NEG-1   go-PRS-SG
         'I do not go to school.'

---

[18]   For an exhaustive description of the system of negative verbs and negation, see Edygarova (2015).

b. *Mon   shkolaje   u-g   myn-y*

   Мон   школае   у-г   мын-ы.

   1SG   school.ILL   NEG-1   go-SG

   'I will not go to school.'

c. *Mon   shkolaje   ö-j   myn-y*

   Мон   школае   ö-й   мын-ы.

   1SG   school.ILL   NEG-1   go-SG

   'I did not go to school.'

As for the position of the negative verb, it immediately precedes the main verb. Only particles, short adverbs and the complementizer *ke* 'if' can intervene between the two verbs (14).

(14)   *so   u-g   na   uža.*

      3SG   NEG.PRS-3   yet   work.SG

      '(S)he does not work yet.'

<div align="right">(Edygarova 2015:2)</div>

In the 2nd past tense,[19] negation is formed either with the suffix *-mte* (15a) or with the negative particle *övöl* (15b).[20]

(15) a. *Sasha   skolaje   myny-mte.*

      Саша   школае   мыны-мтэ.

      Sasha.NOM school.ILL   go-PST.PRT

      'Sasha did not go to school (it was said).'

---

[19] The 2nd past tense is traditionally called 2nd preterite tense, which is the name of the non-evidential past tense in the Finno-Ugric literature.

[20] The two forms are used equally in the literary language, but there is a difference in the origin of the two negations. The analytic form originated in the Northern dialect, while the synthetic form originated in the Southern dialect.

b. *Sasha   skolaje   övöl   myn-em.*

Саша   школае   öвöл мын-эм.

Sasha.NOM school.ILL   NEG   go-II.PST.3SG

'Sasha did not go to school (it was said).'

The particle *övöl* is also used in existential (16a), locative (16b) and possessive (16c) sentences.

(16) a. *kar-iṇ   zoopark(-ez)   eʋeḻ.*

city-INE   zoo(-3SG)   NEG

'There is no zoo in the city.'

(Edygarova 2015:15a)

b. *mon ńulesk-iṇ   (eʋeḻ).*

1SG forest-INE   NEG

'I am (not) in the forest.

(Edygarova 2015:13a)

c. *so-len   końdon-ez   eʋeḻ.*

3SG-GEN   money-3SG NEG

'(S)he has no money.'

(Edygarova 2015:16a)

As shown by the examples above, the negative particle *övöl* is clause final (16a-c) or it can precede the finite verb (15b). There are three other negative particles whose position is the same as that of the negative verb, i.e. they precede the main verb. One is used in conditionals (17a), another other in imperatives (17b), and the third one in optatives (17c).

(17) a. *Mon   finn   kylly   öj   dyshetskysal,   chukaze*

Мон   финн   кыллы   öй   дышетскысал   ӵуказе

1SG   Finnish language.DAT NEG   learn.COND.PRS.1SG   tomorrow

*ekzamen   uz   luy   **ke**.*

экзамен   уз   луы   ке

test.INST   NEG.FUT.3 be.SG   if

27

'I would not learn Finnish if there was not an exam tomorrow.'

b. *En   myn*!

   Эн   мын!

   NEG   go

   'Don't go!'

c. *aḋami-os   meda-z   viś-e   šu-iśko*.

   human-PL   NEG.OPT-3   be.ill-PL   say-PRS.1SG

   'I say (this) lest people should fall ill.'

(Edygarova 2015:10)

1.3.1.2 *Morphology*

The Udmurt language, like all languages belonging to the Uralic family, has a rich inflectional and derivational morphological system. Since Udmurt is a strongly agglutinative language, its morphology is very transparent. The majority of affixes are suffixes, and the function and the form mostly have a one-to-one correspondence (Winkler 2001, 2011), as illustrated in the following example:

(18)   *vera-s'ky-li-s'ko-dy*

    вера-ськы-лй-сько-ды

    ROOT-REFL-FREQ-PRS-2PL

    'you talk to each other often'

(Winkler 2001:13)

As shown in example (18), the verb *verany* 'to speak' first takes two derivational elements, a reflexive and a frequentative suffix, and then two inflectional elements, a time and a subject-marker. The general pattern of the order of the stem and the affixes is the following:

(19)   (prefix) - stem - derivational suffix(es) - inflectional suffix(es) - clitics[21]

(Winkler 2001)

---

[21]   Clitics such as *-a,* the Y/N-question marker.

Nonetheless, there are some exceptions in the language, namely suffixes with more than one function. One of these special cases is the suffix *-ez/jez*,[22] because this suffix has at least three different functions in the language.[23]

1.3.2 *Valence-changing affixes*

After presenting the main syntactic and morphological properties of the Udmurt language, in the following paragraphs single morphological elements will be discussed, namely those that have a central role in causativization.

Turning to the derivational items, Udmurt has two important valence-changing suffixes: the so-called reflexive suffix *-s'k-* and the causative suffix *-t-*. As shown in the examples below, both have an important role in the causative/non-causative alternation. The non-causative variant – if marked – is always marked by *-s'k-*, while the causative variant is marked by the morpheme *-t-*, as we have seen in example (21).[24]

(20) a. *azin-**sk**-yny*[25]   b) *azin-**t**-yny*

азин-ск-ыны   азин-т-ыны

√result-NCAUS-INF   √result-CAUS-INF

'to develop'(NCAUS)   'to develop'(CAUS)

1.3.2.1 The function of the *-t-* marker

As shown above, the morpheme *-t-* marks the causative variant of the alternation. However, it has two further important functions as well.

(i) Productive causative marker:

As shown in example (21), the morpheme *-t-* is the productive causative marker in Udmurt.

(21) a. *Sasha   gozhtetez   gozht-iz.*

Саша   гожтэтэз   гожт-йз

Sasha.NOM letter.ACC   write-PST.3SG

'Sasha wrote the letter.'

---

[22] The variant with *j* appears after vowel stems.

[23] This suffix will be important later on because it has an important role in causativization, too.

[24] For more on the non-causative/causative alternation, see Chapter 2.

[25] The form *-sk-* is an allomorph of *-s'k-* appearing in a special environment which is not discussed here.

b. *Sasha   Mashajez   gozhtetez   gozhty-**t**-iz.*

Саша   Машаез   гожтэтэз   гожты-**т**-йз

Sasha.NOM Masha.ACC letter.ACC   write-CAUS-PST.3SG

'Sasha made Masha write the letter.'

(ii) Verbalizer:

As shown in example (22), the morpheme *-t-* also functions as a verbalizer in Udmurt.

(22) a. *Sasha   vamysh   ljog-iz.*

Саша   вамыш   лёг-из

Sasha.NOM step.NOM   make-PST.3SG

'Sasha took a step.'

b. *Sasha   vamysh-**t**-iz.*

Саша   вамыш-**т**-йз

Sasha.NOM   take.a.step-V-PAST.3SG

'Sasha took a step.'

As is shown in (22), the morpheme *-t-* is responsible for the verbal category.

1.3.2.2 The functions of the *-s'k-* marker

In addition to serving as the non-causative marker, the morpheme *-s'k-* has other functions, too. According to Kozmács (2008), this morpheme has at least four different derivational functions in the grammar.

(i) It creates reflexive verbs:

(23) a. *Pisej   asse   achiz   korma*

Писэй   ассэ   ачиз   корма

kitty.NOM   self.ACC self.NOM   scratch.PRS.3SG

'The kitty scratches herself.'

(Kozmács 2008:32a)

b. *Pisej*   *korma-s'k-e.*

Писэй   корма-ськ-е.

kitty.NOM   scratch.herself-REF-PRS.3SG

'The kitty scratches herself.'

<div align="right">(Kozmács 2008:32b)</div>

The argument structure of the verbs in (23a-b) contains an agent and a theme, and both arguments are obligatory. However, while in the argument structure of the verb in (23a) the agent and the theme do not have to be coreferent with each other, in (23b) the implicit theme has to be coreferent with the agent, and so it does not need to be visible.

(ii) It creates unergative verbs:

(24)   a. *Petyr*   *bakchaze*   *kopa.*

Петыр   бакчазэ   копа.

Peter.NOM   garden.3SG.ACC   hoe.PRS.3SG

'Peter hoes his garden.'

<div align="right">(Kozmács 2008:82)</div>

  b. *Petyr*   *bakchayn*   *kopa-s'k-e.*

Петыр   бакчаын   копа-ськ-е.

Peter.NOM   garden.INESS   hoe-REF-PRS.3SG

'Peter hoes in the garden.'

<div align="right">(Kozmács 2008:82)</div>

In (24) the verb *kopany* 'to hoe' is a transitive verb with an agent and a theme argument. The verb *kopas'kyny* 'to hoe', on the other hand, is an intransitive-unergative verb with no theme argument. Similarly to the verb *kormas'kyny* 'to scratch' in (23b), *kopas'kyny* 'to hoe' prohibits the appearance of the theme argument. The direct object of the transitive variant can (but does not have to) occur in the sentence as a locative adjunct (24b).

<div align="right">31</div>

(iii) It creates unaccusative verbs:

(25) a. *Soje   todmo   vrach   emja.*

        Сое   тодмо   врач   эмъя.

        he.ACC   known   doctor.NOM   cure.PRS.3SG

        'It is a known doctor, who cures him.'

<div align="right">(Kozmács 2008:79a)</div>

  b. *So   todmo   vrach   doryn   emja-s'k-e.*

       Со   тодмо   врач   дорын   эмъя-ськ-е.

       he.NOM   known   doctor.NOM   at   heal-REF-PRS.3SG

       'It is at the known doctor, where he heals.'

<div align="right">(Kozmács 2008:79b)</div>

The 'surface' subject of unaccusative verbs is the 'deep' object (Levin & Rappaport Hovav 1995, henceforth: L & R H 1995). This can be seen in (25a) and (25b). *Emjany* 'to cure' has an agent and a patient argument. However, in (25b), containing the verb *emjas'kyny* 'to heal', only the patient of (25a) may appear, while the agent *vrach* 'doctor' is not allowed.

As we have seen, the morpheme *-s'k-* has different functions in Udmurt. Therefore the following assumption appears to be reasonable: functions (i)-(iii) of the morpheme can be traced back to one basic function, namely the reduction of the theme argument.

(iv) Passivization:[26]

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[26]   The most common passive suffix in Udmurt is the *-(e)myn* participial marker:

(i) *So zale   pydloges intyjamyn.*

    Со залэ   пыдлогэс интыямын.

    it hall.ILL   back   place.PASS

    'It is placed to the back into the hall.'

<div align="right">(Kozmács 2008:99c)</div>

However, the existence of the passive in Udmurt has been debated in the literature. Adapting the classification of Siewierska (2001), Asztalos (2010) states that participial constructions are canonical passives because they fulfill two syntactic constrains: i) the subject of the passive sentence is the object of the original sentence, ii) the subject of the original sentence can be expressed by an oblique argument in the passive. F. Gulyás & Speshilova (2014) go further and adapt a pragmatic constraint of Siewierska (2011). They argue that the use of these passives is restricted to a specific resultative meaning compared to their active counterparts. They argue, however, that these criteria are valid only for transitive-base passives. The real passive nature of intransitive

(26) *Soku   kyk   choshen   busyyn   luozy: odigez   bas'ti-s'k-oz,*
    Соку   кык   ӵошен   бусыын   луозы: одйгез   басьтй-ськ-оз,
    then   two   together.INSTR   field.INESS   be.FUT.3PL one.DET   take-REF-FUT.3SG

    nosh muketyz   kel'tis'koz.
    нош мукетыз   кельтй-ськ-оз.
    and other.DET   leave-REF-FUT.3SG

    'Then two men will be in the field: one will be taken and the other left.'[27]

<div align="right">(Matthew 24,40; Kozmács 2008:96a)</div>

Passivization with *-s'k-* is very common in the text of the Bible (see (26), which is a sentence from the new translation of the Gospel by Matthew). In the Udmurt passive sentence the agent either remains unexpressed or it appears with the postposition *pyr* 'by' (27).

(27) *kyshnomurten,   pe,   shud pyr   saptas'keme   ug   poty*
    кышномуртэн,   пе,   шуд пыр   саптаськеме   уг   поты
    woman.INSTR   so.to.speak court through mire.PART.1SG NEG.2   come.SG
    'I would not like to be mired with this woman by the court.'

<div align="right">(Kozmács 2008:95)</div>

However, F. Gulyás & Speshilova (2014) argue that *-s'k-* can appear in constructions where the object is marked with accusative case and the subject is absent. In these sentences the verb bears a 3rd person plural marker and the Agent can be expressed by a noun phrase bearing Instrumental case.

(28) *Perepec/-ez   s'i-is'kiz   (anaj-en)*
    perepech(NOM)/-ACC   eat-REFL.PST.3SG   mother-INST
    'The perepech was eaten (by the mother).'

<div align="right">(F. Gulyás & Speshilova 2014:9b)</div>

---

constructions is questionable, and they call these impersonal passives. F. Gulyás & Speshilova (2014) show that this is an intermediate stage between R-impersonal and passive constructions.

[27] The English translation is from the New King James Version.

Since these constructions have different syntactic properties than passives formed with -*emyn,* F. Gulyás & Speshilova (2014) consider -*s'k*- constructions R-impersonals (in the sense of Siewierska 2011). R-impersonal means that the construction is impersonal with an indefinite or non-referential human Agent.

1.3.3.   *The suffix* -ez/jez *in Udmurt*[28]

In this section the suffixation -*ez/jez* will be discussed. As will be shown, this suffix appears in various constructions in the Udmurt syntax, and thanks to this characteristic, it has been analyzed in many different ways. In the following I propose a comprehensive analysis for the different functions of this suffixation and I assume that the common feature in the uses of the suffix is the notion of 'associability'.

1.3.3.1   A general picture of the different functions of the suffix

The morpheme -*ez/jez* has always been in the interest of studies both as an accusative (e.g. Csúcs 1980, Kel'makov-Hännikäinen 1999, Kontratjeva 2002, 2010, Kozmács 2007, among others) and as a possessive marker (e.g. Nikolaeva 2003, Edygarova 2009, 2010, Assmann et al. 2013, among others). This interest shows that this morpheme has a central position in the syntax of the Udmurt language. Based on previous studies, Winkler (2001, 2011) identifies four main functions for the morpheme -*ez/jez.*

The first important function of the -*ez/jez* affix is to mark the accusative case[29] when the direct object of the transitive verb is definite:[30]

(29)   a. *Sasha   kniga   lydziz.*

Саша   книга   лыдӟиз.

Sasha.NOM book.(ACC) read.PST.3SG

'Sasha read a book.'

---

[29]   In addition to the -*ez/jez* variants, accusative case has two more markers: -*yz* and -*ty,* but they are used only in the plural. In the literary language these two markers are used as free alternants, but originally -*yz* comes from the Northern dialect and -*ty* from the Southern dialect of Udmurt.

[30]   For more information on direct object marking, see section 1.3.3.3.3

b. *Sasha   kniga-jez   lydziz.*

   Саша   книга-ез   лыдӟиз.

   Sasha.NOM book.ACC   read.PST.3SG

   'Sasha read the book.'

In example (29a) the NP *kniga* 'book' appears in the sentence without a visible ACC case, and it can be interpreted both as a verb modifier or an indefinite object. In (29b) the direct object is encoded with ACC case and it has a definite meaning: 'the book'. However, it will be shown that the picture is not so simple: it is not the case that only definite direct objects bear accusative case.

The affix *-ez/jez* is also the possessive marker of the 3rd person singular, as exemplified in (30).

(30) *Sashalen   kniga-jez*

     Сашалэн   книга-ез

     Sasha.GEN book-3SG

     'the book of Sasha'

The appearance of *-ez/jez* on the possessum is obligatory, the absence of the morpheme in the possessive construction is ungrammatical.

In her dissertation on possessive constructions in Udmurt, Edygarova (2010) argues that possessive suffixes in the language can be used in two different functions: i) marking the possessum, what she calls possessive use, and ii) marking an agreement relation, what she calls functional use. In the latter case the possessive suffix creates a relation between its referent (marked by the possessive suffix e.g. on a nonfinite predicate) and another constituent of the sentence.

As a derivational morpheme, the affix *-ez/jez* can nominalize almost every construction in Udmurt (see Alatyrev 1970, Winkler 2001, 2011), as the following example shows, where the affix is attached to the construction *ton ponna* 'because of you':

(31)   *ton   ponna-jez*

тон   понна-ез

you   because.of-NOMIN

'who/which is because of you'

<div align="right">(Winkler 2001:13)</div>

To extend the observation of Alatyrev (1970) and Winkler (2001, 2011), I assume that in these constructions the affix *-ez/jez* is not just a nominalizer but it also functions as a determiner of the whole DP and in addition it also marks contrast.

Udmurt does not have a definite article. The last function of the affix *-ez/jez* listed by Winkler (2001, 2011) is to mark definiteness.

(32)   *guzhdor   vylyn   turyn-ez   cheber*

гуждор   вылын   турын-эз   чебер

meadow   on   grass-DEF   beautiful

'On the meadow the grass is beautiful.'

<div align="right">(Winkler 2001:32)[31]</div>

In the following paragraphs I will try to give a comprehensive picture of the syntactic and semantic properties of the morpheme *-ez/jez* both as the accusative case marker and as a marker of definiteness, and more generally as the marker of the pragmatic category associability. Since the accusative case marker originates from the same affix, we can see the pathway of grammaticalization from marking the extensive use of possessive (in the sense of Fraurud (2001)) to an accusative case marker.

1.3.3.2   Extensive use of the possessive *-ez/jez* in Udmurt

The extensive use of possessives in many Uralic languages is well known and has been extensively documented in the descriptive literature. It is repeatedly pointed out that the third person and sometimes the first and the second person singular possessive suffixes are used "determinatively'', "as definite articles'' or "instead of definite articles'' (e.g. Collinder 1960; Schlachter 1960; Kramsky 1972, Rédei 1988, Leinonen 1998), or in little bit wider sense they are used to mark definiteness of the noun (see e.g. Collinder 1960, Künnap 2004, or

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[31]   The example sentence originally appeared in Alatyrev (1970) and since then it has been used in many related studies. In the course of this work I always cite the relevant study instead of the original one.

Nikolaeva 2003). In the Uralic languages the possessive suffix is assumed to have developed out of a personal pronoun that was an enclitic already in Proto-Uralic (e.g. Janhunen 1981, Raun 1988, Décsy 1990), and this definiteness marking function is assumed to have existed already in Proto-Uralic.

However, Nikolaeva (2003) claims that marking definiteness does not account for all the cases in which a possessive suffix appears in a non-possessive function. Empirical evidence for this proposal comes from the fact that possessive suffixes in Uralic languages are compatible with indefinite NPs, too. Consider the following example from Norther Khanty (33):

(33) *Amŏlaj-el   kawərl*

      something-3SG   cooks

      '(She) is cooking something.'

<div align="right">(Nikolaeva 2003:2)</div>

In addition, the possessives can appear on non-nominal expressions e.g. verbs, adjectives, conjunctions or postpositions, as illustrated in example (31) and repeated here as (34):

(34) *ton   ponna-jez*

      тон   понна-ез

      you   because.of-NOMIN

      'who/which is because of you'

<div align="right">(Winkler 2001:13)</div>

These facts suggest that instead of taking *-ez/jez* to be a definiteness marker, it is better to talk about special cases of possession relations. In her analysis – based on data from Uralic languages such as Khanty, Nenets, Komi and Udmurt – Nikolaeva (2003) assumes that in addition to the possessive relationship, possessive markers have at least two more functions in Udmurt: marking identifiability and associability.[32]

Identifiability is defined as a "cognitive status of a referent whose mental representation the interlocutors share at the time of the utterance" (Nikolaeva 2003:132). Following Lambrecht (1994), Nikolaeva (2003) argues that there is no one-to-one correspondence

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[32]   Nikolaeva (2003) focuses on possessives in the Uralic languages such as Khanty, Nenets, Komi and Udmurt. Nevertheless, in this dissertation I cite only the data and analyses connected to Udmurt.

between definiteness and identifiability, since as a cognitive category, identifiability is universal, as opposed to definiteness, which is a grammatical category, a feature marking associated with nominal expressions.

Identifiability, as a pragmatic category, means that both the speaker and the hearer can identify the referent of the relevant NP in the sentence (Lyons 1999). The identification of this noun phrase comes either from the shared common knowledge (e.g. unique nouns such as 'the Sun' or 'the Moon' or generic noun phrases) or from the situational context (already mentioned or assigned to a referent).

The function of identifiability comes from the basic meaning of the possessive construction, encoding the relationship between two entities. Identifiability can be based on deixis and situational context, as exemplified in (35).

(35) *Guzhdor   vylyn   turyn-ez   cheber*.
      гуждор   вылын   турын-эз   чебер
      field.NOM   on   grass-3SG   beautiful
      'The grass on the field is beautiful.'

(Nikolaeva 2003:6b)

As Nikolaeva (2003) argues, in the case of (35) the appearance of the possessive suffix on *turyn* 'grass' indicates that the grass in question is available for direct sensory perception.

Following Kempson (1977), Nikolaeva (2003) argues that possessive constructions can be analyzed as expressing any kind of relation between the possessor and the possessee. Besides the prototypical possessive relation, which is the ownership relation between the possessor and the possessum, one of the non-prototypical possessive relationships is what she calls 'associative'. The notion 'associative' suggests a relation between two entities in a given context. In the Uralic languages 1st and 2nd person marking may express this kind of relationship:

(36) *Ton   cheber   apaj-e!*[33]

     тон   чебер   апа-е

     you   beautiful   sister-1SG

     'You, my beautiful sister!'

(Nikolaeva 2003:13b)

Associativity is also a central notion in Fraurud's (2001) study on possessives with an extensive use in four different languages, including Udmurt. The extensive use of the possessive can be measured with the help of corpus studies. Relying on Suihkonen's (1990) corpus study, Fraurud (2001) argues that in Udmurt, in addition to the original possessive use, possessives are used in a larger context. He supports this conclusion with statistical evidence, too. "The possessive suffix is found in 331 of 1,122, i.e. 30%, of the subject NPs and in 231 of 571, i.e. 40%, of the object NPs" (Fraurud 2001:251).[34] She proposes that the extended associative use of the suffix is connected to a larger situation use which is a further extension, an anchoring into the situational context itself. She concludes that associativity is more essential than referentiality. It is important to note that in contrast to to possessive constructions, in the extensive use of the possessive the appearance of the possessive suffix is optional.

Following Nikolaeva (2003) and Fraurud (2001), I assume that the associative use of the possessive suffix also exists in existential sentences where the subject of the sentence is marked with the 3rd person singular suffix, but the marking is not obligatory. Consider the following examples from Edygarova (2015):

(37) a. *kar-iṉ   zoopark(-ez)   vań.*

     city-INE zoo(-3SG)   EX.PRS

     'There is a zoo in the city.'

(Edygarova 2015:15)

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[33]   The associative use of the possessive suffix can be captured only in a context where the addressee is not in a real kinship relation with the speaker. The use of the suffix is similar to the German expression 'Meine Damen und Herren'.

[34]   These frequencies of possessive marked NPs are radically different from those in languages such as English, where we cannot speak about an extended use possessives. In these languages the frequency of NPs with possessive „is seldom more than a few percent" (Fraudrud 2001:251).

b. *kar-iṉ   kaliḳ(-ez)   tros.*

city-INE   people(-3SG)   many

'There are many people in the city.'

<div style="text-align: right">(Edygarova 2015:16)</div>

In these examples above there is no prototypical possessive relationship between the two NPs, although one of the NPs always expresses a location (i.e. a Ground in Talmy's 1975 sense), for instance *kar* 'city' in (37),   and the other NP expresses an entity 'inside' this location (i.e. a Figure in Talmy's sense). This relation between the location and the locatum is very similar to the whole-part relation, which is also a non-prototypical possessive relation, although cross-linguistically it is often expressed with possessive constructions. This semantic relation can be easily exemplified with the following possessive constructions where the same NPs are used:

(38)   a. *kar-len   zoopark-ez vań.*

кар-лэн зоопарк-ез вань

city-GEN zoo-3SG   EX.PRS

'The city has a zoo.'

b. *kar- len   kalyḳ-ez   tros.*

кар-лэн   калык-ез   трос

city- GEN   people-3SG   many

'The city has many people.'

Following the argumentation about the use of the 3rd person singular possessive suffix in the Uralic languages, I can conclude thus far that in Udmurt the extensive use of this suffix is based on the cognitive notion of 'associability' rather than definiteness or referentiality. In the associative use the possessive encodes a relation between two entities in the sentence, but not just in a given context but in a wider sense. As Nikolaeva (2003) suggests, the entities are identifiable because of their pragmatic association with the other identifiable entity and they do not need an obvious reference (or reference-point in the sense of Langacker 1993). This is because, as it was proposed by Fraurud (2001), they can be anchored to the linguistic or situational context itself.

I assume that the cognitive category of 'assosiability' in Udmurt entails all the presented functions of the possessive suffix such as marking definiteness, referentiality and identifiability.

Finally, there is a function of possessive affixes which is only available in the Permic branch of the Uralic languages and in the Mari language: this function is to mark emphasis or contrast in the language.

(39)   *Ulizy-vylizy*   *kyk*   *bratjos,*   *pokchi-ez*   *kuaner,*
       улӥзы-вылӥзы   кык   братъёс   покчи-ез   куанер
       lived-were.PST.3SG   two   brother.PL   younger.brother-3SG   poor

       byzym-ez   *uzyr.*
       быӟым-ез   узыр
       older.brother-3SG   rich

       'There lived two brothers, the younger one was poor, the older one was rich.'

(Nikolaeva 2003:13b)

It is argued in the literature that the contrastive use of the possessive suffix in the Volgic region is an innovative development of these languages and has a strong connection to language contact with the neighboring Turkic languages such as Tatar and Chuvas. However, following the assumption about associability, I submit that the possibility to develop the possessive in this function also has a connection to the associative use discussed above, since the notion of contrast is discourse internal and entails a relation between two (or more) entities which are identifiable.

This subsection has dealt with NPs marked with the suffix *-ez/jez* in subject position, although in Udmurt objects are also marked with this suffix. In the following paragraphs object NPs will be in the focus of the discussion.

1.3.3.3   *-ez/jez* as the Accusative case marker

1.3.3.3.1 The origin of the Accusative case in Udmurt

As Csúcs (2005) argues, the original Uralic accusative suffix *-*m* disappeared in the early Proto-Permic language. (We can find some traces in the Accusative forms of the possessive suffixes and the Accusative forms of pronouns, though.)

The new accusative case suffix *-es/-is* (which is the reconstructed form of the suffix *-ez/jez*) appeared during the Proto-Permic period, and it grammaticalized from the 3rd person singular

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possessive suffix. Wichmann (1923-24) attributes this to the determinative function of the possessive suffix. It is assumed that the 3rd person singular possessive suffix was used to mark definite objects already in the Proto-Permic language, and it has grammaticalized as the suffix of Accusative case due to this function (Csúcs 2005).[35]

1.3.3.3.2 Previous studies on Direct Object Marking in Udmurt

In nominative-accusative languages without a definite article, the definiteness of the object can be marked by ACC case. This is the case in Udmurt, too, and as Kondratjeva (2010) argues, the coding of the direct object is controlled by semantic factors.[36] She lists the following important criteria:

1. The direct object is marked with ACC when it has a [+animate] feature:

(40)	*mon*	*uramyn*	*l'ek*	*puny-jez/*	*cheber*	*korka*	*adzhi.*
	Мон	урамын	лек	пуны-ез/	чебер	корка	адӟи.
	1SG	street.INESS	malicious	dog-ACC/	nice	house.(ACC)	see.PST.1SG

'I saw a malicious dog / a nice house on/in the street.'

(Winkler 2001:21)

As we can see in example (40), the NP with the [+animate] feature has an overt ACC case marker, in contrast to the NP with the [–animate] feature in the same environment. The definiteness of the NP does not play a role in the markedness, since the indefinite NP is also marked with the suffix.

2. The direct object is marked when it is definite:

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[35] A similar development for the Accusative case in Hungarian is proposed by Beke (1931).

[36] In her previous work (Kondratjeva 2000), it is the semantics of the verbs that is taken as basis of the analysis. The direct object is marked with ACC case if the verb: i) requires a resultative object, ii) expresses human feelings, physiological statements, or iii) is cognitive, perceptive and expresses physical action. The direct object is never marked if the verb: i) expresses a profession-type activity or is repetitive, or ii) aims at an abstract object.

(41) a. *Sasha   kniga   lydziz.*

      Саша   книга   лыдӟиз.

      Sasha.NOM book.(ACC) read.PST.3SG

      'Sasha read a book.'

  b. *Sasha   kniga-jez   lydziz.*

      Саша   книга-ез   лыдӟиз.

      Sasha.NOM book.ACC   read.PST.3SG

      'Sasha read the book.'

As previously mentioned, the direct object of the verb 'read' appears with the *-ez/jez* suffix when it is definite (41a), and without *-ez/jez* when it is indefinite (41b).

3. The direct object is always marked in resultative sentences:

(42) a. *mon   zhuk   s'ii*

      мон   жук   сии

      1SG   porridge.(ACC)   eat.PST.1SG

      'I have eaten of the porridge.'

                                 (Winkler 2001:21)

  b. *mon   zhuk-ez   s'ii*

      мон   жук-ез   сии

      1SG   porridge-ACC eat.PST.1SG

      'I ate the porridge.'

                                   (Winkler 2001:21)

In case the direct object is encoded with the overt ACC, it is interpreted as a resultative object (see 42b), contrary to the direct object with covert ACC case, where *zhuk* 'porridge' has the meaning 'of the porridge' (see 42a).

4. The totally affected direct object is always marked:

(43) *zhytaze*   *mon*   *doris'*   *uzh*   */uzh-ez*   *les'tysa*   *puki*

жытазе   мон   дорысь   уж   /уж-ез   лэсьтыса   пуки

evening.ILL   1SG   house   work.(ACC)/ work-ACC   do.CONV   sit.PST.1SG

'In the evening I sat and did some/the whole homework.'

(Winkler 2001:20)

As shown in (43), the direct object marked with overt ACC is interpreted to be totally affected by the event.

Although the last two types – type 3 and type 4 – are distinguished by Kondratjeva (2010), it is not clear how they really differ from each other syntactically or semantically.

1.3.3.3.3   Differential Object Marking in Udmurt

The term Differential Object Marking (Bossong 1985, Aissen 2003) is typically used to characterize those languages in which direct objects are marked withAccusative case in some cases and are unmarked in other cases. The markedness of the object is usually derived by semantic and pragmatic features. Aissen (2003) argues that the function of object marking in Differential Object Marking languages is to distinguish between the subject and the object. Since typical subjects are animate and definite, while typical objects are inanimate and indefinite, objects have to be marked when they are animate and definite. Examining those languages which show object marking alternations, she concludes that the marking of the object in these languages is influenced by two main factors: animacy and definiteness. Based on this conclusion, in her extended theory of Differential Object Marking, Aissen (2003) proposes two hierarchies, the Definiteness Scale (44a) and the Animacy Scale (44b).

(44)   a. *Definiteness Scale*: personal pronoun > proper name > definite NP >indefinite
           specific NP > non-specific NP
       b. *Animacy Scale*: human > animate > inanimate

The object markedness system of a Differential Object Marking language can be described by a mix of these scales, as illustrated in Figure 1.

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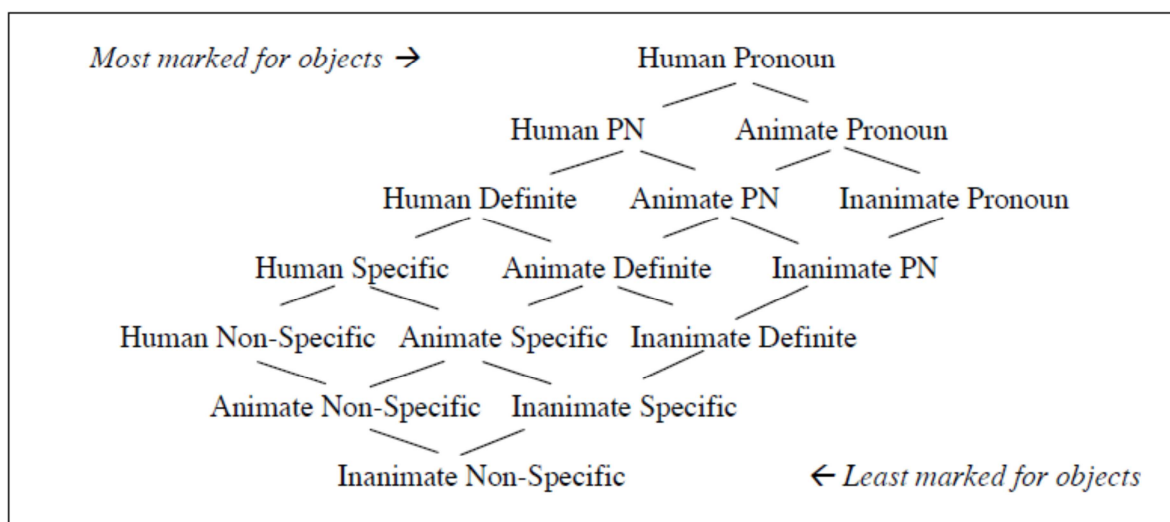
Figure 1: *Relative markedness on the dimensions of animacy and definiteness* (Aissen 2003: Figure 4)

What this figure shows is that human pronouns typically bear object marking in Differential Object Marking languages, and the less frequently marked objects are the inanimate non-specific objects. Generally, the higher prominence a direct object has, the more likely it is to be overtly case-marked. Of course, languages differ in whether the animacy or the definiteness factor plays a more important role in their system of Differential Object Marking.

Turning back to Udmurt, the role of animacy and defininetess in Differential Object Marking has not been properly studied so far in this language. It is clear, however, that the markedness of the direct object is influenced by these two factors, and it appears to be the case that definiteness and animacy equally affect the system of direct object marking in Udmurt.

Definite objects (including inherently definite objects like proper names and pronouns) are always case marked, no matter whether they are human, animate or inanimate.

(45) a. *Mon*   **ton/tone*   *magazinys'*   *adzhi.*

  мон   *тон/тонэ   магазинысь   адӟи.

  1SG   2SG/2SG.ACC   shop.ABL   see.PST.3SG

  'I saw you in the shop.'

b. *Mon   *Sasha/Sashajez   magazinys'   adzhi.*

мон   *Саша/Сашаез   магазинысь   адӟи.

1SG   Sasha.(ACC)/Sasha.ACC shop.ABL   see.PST.3SG

'I saw Sasha in the shop.'

c. *Mon   (so(ze))   *kniga/knigajez   utchaj   otyn.*

Мон   (со(зэ))   *книга/книгаез   утчай   отын.

1SG   that.ACC   book.(ACC)/book.ACC search.PST.1SG   there

'I searched for the book there.'

Animate objects are also case marked, regardless of whether they are definite (46a), indefinite specific (46b) or indefinite non-specific (46c).

(46) a. *Ali   Sasha   (so(ze))   punyjez   utcha.*

Али   Саша   (со(зэ))   пуныез   утча.

now Sasha.NOM that.ACC   dog.ACC   search.PRS.3SG

'Now Sasha is searching for that/the dog.'

b. *Mon   *puny/punyjez   utchas'ko.*

Мон   *пуны/пуныез   утчасько.

1SG   dog.(ACC)/dog.ACC search.PRS.1SG

'I am searching for a (specific) dog.'

c. *Mon   *kochysh/kochyshez   utchas'ko.*

Мон   *кочыш/кочышез   утчасько.

1SG   cat.(ACC)/cat.ACC   search.PRS.1SG

'I am searching for a cat.'

Now we can clearly see that definite objects and [±] human animate objects are always marked. This means that the only field which needs to be examined is the overlap of inanimate and indefinite direct objects in Udmurt.

Inanimate indefinite but specific objects can be both marked and unmarked. The markedness vs. unmarkedness of the direct object depends on the preference of the speaker.

(47) *Mon*   *kniga/knigajez*   *utchas'ko.*

       Мон   книга/книгаез   утчасько.

       1SG   book.(ACC)/book.ACC   search.PRS.1SG

       'I am searching for a (specific) book.'

That the object in these sentences is indefinite can be justified by the *odig* test: if *odig* 'one' is inserted before the noun, we still get the marked-unmarked alternation in all of the cases:

(48) *Mon*   *odig*   *puny*   *utchas'ko.*

       Мон   одйг   пуны   утчасько.

       1SG   one   dog.(ACC)   search.PST.1SG

       'I am searching for a (specific) dog.'

(49) *Mon*   *odig*   *punyjez*   *utchas'ko.*

       Мон   одйг   пуныез   утчасько.

       1SG   one   dog.ACC   search.PST.1SG

       'I am searching for a (specific) dog.'

Contrary to specific indefinite direct objects, non-specific inanimate ones are clearly never marked.

(46) *Mon*   *kniga/*knigajez*   *utchas'ko*   *gubios*   *s'arys'.*

       Мон   книга/* книгаез   утчасько   губиос   сярысь.

       1SG   book.(ACC)   search.PST.1SG   mushrooms.PL   about

       'I am searching for a book about mushrooms.'

Recently, it has been repeatedly proposed in the literature that the information status of the direct object may also affect the Differential Object Marking system of a language. A new model for Differential Object Marking has been proposed by Nikolaeva & Dalrymple (2006). They argue that there is a strong tendency across languages to mark the direct object when it

is the secondary topic of the sentence. Thus, in their analysis Differential Object Marking is the grammatical coding of the information structure role of secondary topics.[37]

However, Nikolaeva & Dalrymple's (2006) proposal about Differential Object Marking as a grammatical coding of secondary topics seems to be problematic if we try to adopt it to all Differential Object Marking languages. For instance, we cannot be sure that all of the utterances contain both primary and secondary topics in these languages, and we can observe differences in the object marking in those sentences, too, in which there is only a primary topic and a focus constituent (this is the case, for instance, in Udmurt). But the main idea of the proposal, i.e. that information structure or the information status of the direct object may be the source of Differential Object Marking, is indeed plausible.

Topicality has a strong connection to the two hierarchies of Aissen (*Definiteness Scale, Animacy Scale*, 2003; see in (44)). The more prominent the argument is on the *Animacy Scale* and the *Definiteness Scale*, the more likely it is to be the topic of the sentence; prototypical topics are humans and definite NPs. This means that Differential Object Marking is triggered by the topical status of the NP in direct object position and the emergence of a Differential Object Marking system is motivated by the need to mark atypical objects. As proposed by Nikolaeva & Dalrymple (2006), the grammaticalization of the marked constructions can take two directions: i) Differential Object Marking may be extended to non-topical objects and ii) Differential Object Marking may remain to be restricted to topical objects (Iemmolo 2010).

In Udmurt the empirical data presented above support the second direction, since all the ACC marked direct objects have the semantic features [+] human and [+] specific.

1.3.3.4 The grammaticalization pathway of -*ez/jez*

In her analysis of the grammaticalization pathway of possessives and definiteness markers in the Uralic languages, Gerland (2014) assumes the existence of a relational suffix instead of a possessive suffix. She proposes that relational suffixes have two main functions in these languages (Gerland 2014):

1. Establishing a concrete relation in which the marked element is the possessum, and in this function the definite content of the relational suffix is not relevant.

2. Establishing an associative relation in which the marked element is unique and definite, and in this function the possessive content of the suffix is not relevant.

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[37] The notion of secondary topic is developed by Nikolaeva (2001). She defines it as the „entity such that the utterance is construed to be about the relationship between it and the primary topic" (Nikolaeva 2001:26).

Indeed, as shown above, the Udmurt suffix *-ez/jez* may mark a clearly possessive relation, but what is more interesting, it may also mark an associative relation between two entities in the sentence. Since the associative relation can be based on i) deixis, ii) situational context and iii) anaphors, this function of the marker might lead to the grammaticalization of the marker to encode Accusative case via the function of topic marking.

This is what we can see in today's Udmurt. The suffix still holds its original function to mark an associative relation when the NP stands in subject position, but it encodes Accusative case when the NP stands in the object position.

1.4   Theoretical background

The present dissertation is written in the generative transformational grammar framework. This framework originates from Chomsky's seminal works (e.g. Chomsky 1965, 1981, 1986).

The main assumption of generative grammar is that the syntax of natural language is organized by a finite set of fundamental principles and a finite set of so-called parameters (*Principles and Parameters Theory*). These principles and parameters together form Universal Grammar. Universal Grammar is a linguistic model of the human faculty of language (cf. Chomsky & Lasnik 1993). In the *Principles and Parameters Theory* principles are common to all languages. This contrasts with parameters, which have binary settings (plus and minus), and languages choose between the two settings of the parameters. For instance, the *Empty Category Principle*, which requires that all traces must be properly governed, is a fundamental principle, applicable to all languages. In contrast, *The Head Directionality Parameter* is a binary parameter which differentiates between head-initial and head-final languages. These parametric choices result in cross-linguistic variation.

The first model based on the *Principles and Parameters Theory* is *Government and Binding Theory* (cf. Chomsky 1981), which was followed by the *Minimalist Program* (cf. Chomsky 1993, 1995).

In the following paragraphs two sub-theories are introduced, namely, *Distributed Morphology* (Halle & Marantz 1993, 1994) and the unified theory of causatives by Pylkkänen (2002, 2008). These theories are used throughout the dissertation as theoretical frameworks. When individual chapters make use of other theoretical approaches, too, then those approaches are introduced in the relevant places.

1.4.1 *Distributed Morphology*

In the theory of *Distributed Morphology*, which is a theory of the syntax-morphology interface (Halle & Marantz 1993, 1994), morphemes are syntactic entities, and similarly to phrases and sentences, words are also combined in a hierarchical structure all the way down. Word-internal and word-external structures are built in the same way, and morphology (in the traditional sense of word-formation) does not exist as a generative component separate from syntax.

In weak Lexicalism derivational and inflectional morphology were treated differently: inflectional items were viewed to be part of the syntax, realized as functional heads in the syntactic structures, while derivational items were referred back to the lexicon, as pre-syntactic items.

In contrast to this lexicalist model, the theory of *Distributed Morphology* (Halle & Marantz 1993, 1994) and the anti-lexicalist model (Marantz 1997, 2001) suggest an alternative approach and argue that the same syntactic rules can be applied to idioms, phrases and even to words. In *Distributed Morphology* syntax is the only generative engine of grammar. Syntax operates with abstract features, putting together abstract morphemes. A few morphological operations that perform minor adjustments on the output of syntax (such as fusion, fission, or 'affix lowering') happen after syntactic operations, in the (non-generative) morphological component of grammar. Morphology is thus 'distributed' across the grammar: word-formation and affixation take place in syntax, but a few morphological adjustments happen after syntax. Thus, this model gives an answer to the question of why word formation with same affix can have different meanings.

Contrary to Reinhart's (2002) active lexicon theory, in *Distributed Morphology* the Lexicon or Vocabulary is the store of the basic vocabulary of the language; it contains roots and functional elements such as inflectional and derivational items. Words with a lexical category N, V and A are created by attaching a lexical category head *n/v/a* to the root (Marantz, 2000, Arad 2005).

(47) a.

```
          a
        /   \
       a    √atroc
      /atrocious/
```

b.

```
          n
         / \
        n   √atroc
      /atrocity/
```
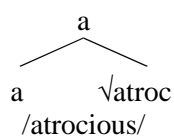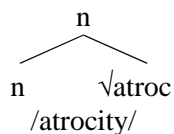
Affixes can be attached either to the root or to the head which is already attached to the root to form N, A or V (Arad 2005). The former is the so-called 'lexical' word formation and latter is 'syntactic' word formation.

The Encyclopedia contains the unpredictable, semantic information, the basic meaning of a root or the idiomatic meaning of phrases.

Finally, syntactic operations manipulate roots and heads without morpho-phonological realization. The phonological exponents of syntactic nodes are subject to *Late Insertion*: they are inserted either in later stages of the syntactic derivation (Halle and Marantz 1993) or after the syntactic computation, at the 'PF' level (Halle & Marantz 1994, Marantz 1995). The phonological exponents of lexical items stored in the Vocabulary are paired with a set of conditions on insertion. The appropriate phonological material is inserted into the structure.

(48)

Syntax

Morphology (addition of
morphemes,morphological Merger, etc.)

Vocabulary insertion

Phonological rules

PF   LF
Encyclopedia
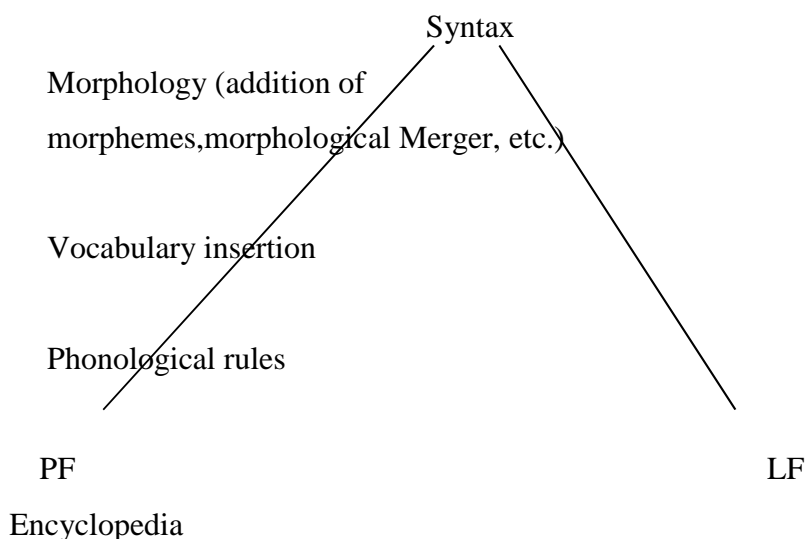
1.4.2   *Pylkkänen (2002, 2008)*

In her theory of causatives, Pylkkänen (2002, 2008) argues for a unified account of all causatives: she suggests that they are all formed compositionally in the syntax.

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The central idea of Pylkkänen's (2002, 2008) analysis of causative constructions is based on two parameters: the *Voice-bundling Parameter* and the *Selection Parameter*. Based on these two main parameters, it is possible to give an adequate explanation of both the systematic cross-linguistic resemblance and the cross-linguistic variation between causatives. Adopting Kratzer's (1994, 1996) proposal for VoiceP as a position of the external argument of the predication, Pylkkänen (2002, 2008) argues for a separate position for the causing event. She calls this position CauseP.[38]

Languages differ from each other with respect to the *Voice-bundling Parameter*. This means that in some languages there are separate positions for Cause and for Voice. This is the case in languages like Japanese, for instance. In some languages, such as English, on the other hand, there is only one bundle: a Voice-Cause head. Consider the following schematic models of the two types:

(49) a. Voice-bundling languages

      x
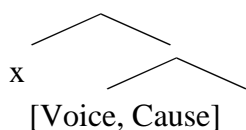
      [Voice, Cause]

  b. Non-voice-bundling languages

      x

        Voice
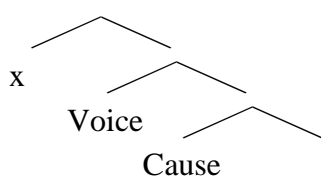
          Cause

The other parameter that is responsible for cross-linguistic variation is also associated with the Cause head. The *Selection Parameter* defines what kind of complements the Cause heads are compatible with. For the *Selection Parameter,* Pylkkänen adopts Marantz's (1995, 1997) account of roots introduced in the previous section, and she proposes that based on their selectional propertes, Cause heads come in three subtypes.

---

[38]   Kratzer's Voice head is called *little v* in Chomsky's (1995) proposal and Pylkkänen's Cause head is called v_{CAUSE} in Harley's (1995) proposal.

I. Phase-selecting Cause head

(50)
```
              CauseP
             /      \
        Cause       VoiceP
                   /      \
            thetaExt      Voice'
                         /      \
                     Voice       …
```
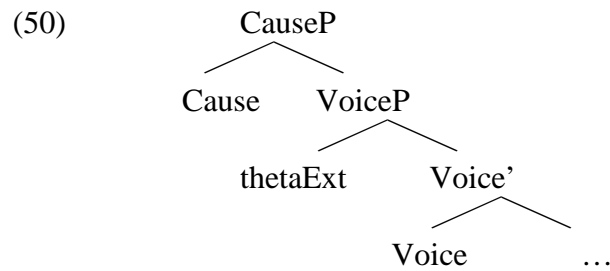
The Cause head selects a phase with an external argument.

II. Verb-selecting Cause head

(51)
```
              CauseP
             /      \
        Cause       vP
                   /   \
                  v     √Root
```
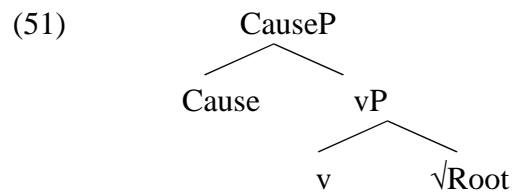
The Cause head selects a verbal predicate with only its internal arguments and without its external argument.

III. Root-selecting Cause head

(52)
```
              CauseP
             /      \
        Cause       √Root
```
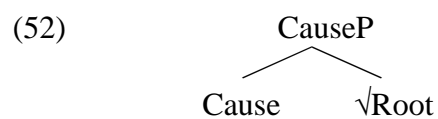
The Cause head selects a root without internal and external arguments.

It is important to note that the two parameters presented above and their binary settings are not language dependent, but structure dependent. This means that there may be parameter switching within a language (Tubino Blanco 2011). This explains language-internal variation.

1.5　The typology of Causative Constructions

Research on causatives goes back to Russian linguistics in the 1960's. The monograph *Typology of Causative Constructions* (1969) was written by a group of Russian linguists. Since this seminal work on causative constructions, causativization has been interesting not just as a morpho-phonological phenomenon, but it has also made important contributions towards answering the crucial question of what the relationship is between syntax and the lexicon, and how they interface.

The classical typological classification of causatives by Nedyalkov & Silnitsky (1973) is based on the relation between the causer and the causee. They set up the following types:[39]

I.　Factitive causation

In factitive causation only the causer causes the causing event; the causer has the most important role in the changes.

(53)　a. *Ja velel emu prijti*[40]

　　　'I ordered him to come.'

　　b. *Ja zakryl dver'*

　　　'I closed the door.'

Factitive causation is divided into two subcategories.

Ia. Distant causation

In distant causation there is no direct relation between the causer and the caused event, and the causee is more or less independent when performing the basic event.

(55)　*Ja prikazal emu ujti*

　　　'I ordered him to leave.'

Factitive distant causation always has an animate causee.

---

[39]　The typological classification of causatives by Nedyalkov & Silnitsky (1973) is reorganized and simplified here.

[40]　The Russian examples come from Nedyalkov & Silnitsky (1973) and follow their example formatting.

Ib. Contact causation

In the case of contact causation there is a direct relation and there is no distance in time between the caused event and the basic event.

(56)   a. *Ja ispugal ego*
            'I frightened him.'

       b. *Ja otkryl dver*
            'I opened the door.'

Factitive contact causation can have either an animate (56a) or an inanimate (56b) causee.

II. Permissive causation

In contrast to factitive causation, in permissive causation the causee has an important role in the changes. The causer only permits or prevents the basic event from happening. Permissive causation is always distant.

(54)   a. *Ja [ne] vpustil ego*
            'I [did not] let him in.'

       b. *On [ne] dal dveri zakryt'sja*
            'He [did not] let the door close.'

In addition to the typological classification based on the relation between the causer and the causee or causing event and basic event, factitive causatives can also be classified on the basis of their morphosyntactic properties.

It is well-known form the typological literature that external causatives can be expressed syntactically (e.g. in Russian, English, French, as exemplified with English in (57a)) or morphologically (e.g. in Hungarian, Finnish, Japanese, as in (57b)).

(57)   a. *Mary made John sing*.

b. *Mari   énekel-tet-te   Jánost.*

Mary.NOM   sing-CAUS-PST.3SG   János.ACC

'Mary made John sing.'

It is trivial that in syntactic factitives the basic event and the causing event are in different syntactic domains, hence these constructions are biclausal. However, it is not so trivial that morphological factitives can be both biclausal and monoclausal. Kitagawa (1986) and Shibatani (1990), among others, argue that while Japanese causatives are formed by a causative morpheme, as shown in example (58), they show biclausal syntactic properties (e.g. regarding modification, negation).

(58) *Rusi-wa   Dyeni-o   utaw-ase-ta*

Lucy-TOP   Jenny-OBJ   sing-CAUS-PST

'Lucy made Jenny sing.'

(Bartos 2011:1c)

In contrast to Japanese, morphologically expressed external causatives in Finnish or Hungarian are monoclausal.

Following Pylkkänen (2000), Bartos (2011) argues that factitives can be classified on the basis of how many linguistically accessible event domains they have. Depending on whether the event of causation is linguistically separable from the core event or not, they can contain one or two domains (Bartos 2011). Biclausal causatives are bieventive, but it is not so trivial whether monoclausal causatives are bieventive or monoeventive. Pylkkänen (2000) argues that both variations are attested cross-linguistically.

Bartos' typological classification is presented below:

Syntactic	Morphological		
Biclausal	Biclausal	Monoclausal	
Bi-eventive	Bi-eventive	Bi-eventive	Mono-eventive

Table 2: *Typology of external causatives* (Bartos 2011: Table 1)

56

1.6   Terminology

In the present dissertation I use 'causative construction' as an umbrella term for lexical, productive, and periphrastic causatives and their argument structure. Causativization is used as the process of forming causative sentences with causative verbs, forming causative verbs by affixation, and complex sentences with 'to let' and 'to make' as matrix predicates.

Following Parsons (1990), I use the term 'inchoative verb' whenever the verb has the meaning 'become Adj', where 'Adj' is the related adjective. The term 'non-causative' is used for the intransitive variant of the causative alternation. Contrary to Nedyalkov and Silnitsky (1973), for instance, I follow the idea that the causative member of the alternation is not always marked by a causative morpheme, and the non-causative variant is similarly not always marked by a non-causative morpheme. This is why I do not use the term 'anticausative'.

1.7   Outline of the dissertation

The Chapters following the Introduction are organized as follows.

Chapter 2 investigates the causative/non-causative alternation in Udmurt. The main research questions concentrate on the morphological marking of the alternation in examples like (57) and the internal structure of verbs taking part in the alternation.

(57) a. *Pinaljos   sajka-zy*.   non-causative
         Пиналъёс   сайка-зы
         children.PL.NOM wake.up-PST.3PL
         'The children woke up.'

      b. *Anaj   pinaljosyz   sajka-t-iz*.   causative
         Анай   пиналъёсыз   сайка-т-йз.
         mother.NOM   children.PL.ACC.3SG   wake.up-CAUS-PST.3SG
         'The mother woke up her kids.'

I propose that the verbs are not derived from each other, instead, they are both formed from the same root. The causative verbs – if they are marked – always contain the causative morpheme *-t-* in their internal structure, and non-causative verbs, if they are marked – always

have the *-s'k-* affix. The syntactic difference between the two verb types can be derived from their different internal structure. The causative variant has a Cause head that hosts the causative morpheme *-t-*, while the non-causative variant has only a Voice head that is merged to the verbal head.

Chapter 3 focuses on the productive, morphologically marked causative constructions illustrated in (58):

(58) a. *Masha   kńiga-jez   lydzh-iz.*

Маша   книга-ез   лыдӟ-из

Masha.NOM   book-ACC   read-PST.3SG

'Masha read the book.'

   b. *Masha   Sasha-jez   kńiga-jez   lydzhy-t-iz.*

Маша   Саша-ез   книга-ез   лыдӟы-т-йз

Masha.NOM   Sasha-ACC   book-ACC   read-CAUS-PST.3SG

'Masha made Sahsa read the book.'

Morphologically marked causatives have special syntactic properties. These are the coding of the causee with ACC case, the fact that ACC case appears on both definite and indefinite causees (as opposed to regular objects), and the invariable order of [+animate] arguments. A syntactic approach is presented for these properties based on Pylkkänen (2002, 2008). In the syntactic structure of factitives in Udmurt, similarly to lexical causative verbs, the causing event is assossiated with the CauseP, and the factitive causative morpheme *-t-* occurs in the head position of this projection and the external argument, the causer, is introduced in the specifier position of VoiceP, in the sense of Katzer (1996). In addition to these crucial properties, this chapter investigates the domain and event properties of productive causatives, too.

Chapter 4 deals with periphrastic causatives. Udmurt has two different verbs that have an important role in analytic causative constructions (59).

(59) a. *Masha   Sasha-jez   kńiga-jez   lydzhyny   kosiz.*

Маша   Саша-ез   книга-ез   лыдӟыны   косӥз.

Masha.NOM   Sasha.ACC   book.ACC   read.INF   order.PST.3SG

'Masha ordered Sasha to read the book.'

b. *Masha*   *Sasha-jez*   *kńiga-jez*   *lydzhyny*   *lez'iz.*

    Маша   Сашаез   книгаез   лыдӟыны   лэзиз.

    Masha.NOM   Sasha.ACC   book.ACC   read.INF   let.PST.3SG

    'Masha let Sasha read the book.'

The complement clause selected by the two lexical causative verbs can be either non-finite or finite. The finite clauses are CPs and the non-finite complements of causative verbs are ECM constuctions. In the case of a non-finite complement, similarly to morphologically marked causatives, the causee argument is encoded with ACC case.

Chapter 5 summarizes the main research questions and results proposed in this work and contains the conclusions. This chapter also lays out the potential directions for further investigations.

CHAPTER 2

Lexical Causatives

2.1   Introduction

This chapter investigates lexical causatives in Udmurt, focusing mainly on the classification of causative alternations and the structure of the alternating verbs that take part in the alternation. The question is interesting from a syntactic point of view: what is the internal structure of these verbs, is there a Cause head and a Voice head in their structure, and if so, how do they combine with each other.

Traditionally, lexical causatives are treated differently from synthetic or productive and periphrastic or syntactic causatives; lexical causatives are formed in the lexicon, while syntactic causatives are formed in the syntax (e.g. Shibatani 1973). The distinction between the two groups is based on their different morphological, syntactic and semantic properties. These differences were listed by Harley (2006) based on Japanese causative constructions:

(1)   A. Lexical causatives:

a) are monoclausal according to all tests;

b) can have idiomatic interpretations;

c) exhibit allomorphy with other lexical causative affixes;

d) are strongly perceived by speakers to be listed in the lexikon;

e) are non-productive.

B. Analytical causatives:

a) are biclausal according to all tests;

b) involve a causee that must be animate/agentive;

c) cannot undergo semantic drift;

d) are productive.

In course of this work lexical and analytical causatives are both taken to be formed in syntax and their different properties, which are listed in (1), come from their internal structure. Namely, in the case of lexical causatives the vP selects a VP or an AP complement, while the complement of analytical causatives is a vP itself. The structures of the two types of causatives are illustrated in (2):

(2)   a. lexical causative: [$_{vP}$ agent [$_{XP}$ [$_{DP}$ [ ]]]]

b. analytical causative: [$_{vP}$ agent [$_{vP}$ agent [$_{XP}$ [$_{DP}$ [ ]]]]]

In (2a) the v head selects only an XP and it results in a monoclausal structure with a single event, while in (2b) the v head selecting another v head results in a syntactically biclausal structure that is also bi-eventive.[41]

The rest of the chapter is organized as follows: section 2.2 looks at the causative/non-causative alternation cross-linguistically, and after this overview, section 2.3 contains the new data coming from Udmurt. After investigating the alternation, the syntactic properties of non-causative and causative verbs are examined (2.4). This section argues that the internal structure of causative transitive verbs contains an extra layer (Cause), while their non-causative variants lack this layer. Section 2.5 closes this chapter with a summary of the behavior of lexical causatives in Udmurt.

2.2   The causative alternation cross-linguistically

The causative/non-causative alternation has been in the interest of linguistic studies in the last decades in different fields: typology, semantics and syntax (e.g. Comrie 1981, Haspelmath 1993, Piñon 2001, Levin & Rappaport Hovav 1995, Alexiadou et al 2006, and Alexiadou 2009, among others), as this alternation appears across languages, and is expressed in different ways. The verbs that participate in the alternation have a lot in common cross-linguistically, but the morphological marking of the alternation is subject to cross-linguistic variation. The alternation involves pairs of verbs such that one verb is intransitive and the other is transitive, and the transitive verb has the meaning 'cause to V-intransitive' (cf. Dowty 1979 and Coppock 2009, among others).

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[41]   As mentioned in a previous section, causative constructions can be divided into groups according to the classification of the events that they contain.

2.2.1 *Focus on the alternation*

It is repeatedly argued in the literature that causative and non-causative verb forms are related to each other and the direction of the derivation between the two verb formations can be deduced from their morphological difference.

The traditional treatment suggests that there is a derivational relationship between the transitive and the intransitive verbs, specifically the transitive verb is derived from the intransitive one by the operation called *Causativization* (e.g. Dowty 1979, Pesetsky 1995 and Harley 1995, among others). This analysis is problematic, however, because it means that all transitive verbs should have an intransitive pair to be derived from, which is not the case.

In contrast to the Causativization approach to the alternation, e.g. Levin & Rappaport Hovav (1995), Reinhart (2000), Reinhart and Siloni (2005) and others assume that although there is a derivational relation between the verbs, the direction of the derivation is reversed: the anticausative (intransitive) verbs are derived from the transitive ones by *Detransitivization*. Although the process of decausativization differs in these approaches, some analyses propose that anticausativization includes the processs of CAUSE operator deletion (e.g. Reinhart 2002, Reinhart and Siloni 2005). Other approaches assume that the CAUSE operator belongs to the lexical semantic representation (e.g. Levin & Rappaport Hovav 1995). Similarly to causativization, this approach also has the problem that not every anticausative verb has a causative/transitive variant.

In addition to these two main approaches where the derivation is always based on one of the variants taking part in the alternation (i.e. anticausative in Causativization and transtitive in Detransitivization), there are other accounts which suggest that there is no derivational relationship between the two variants; both of the alternants are derived from the same root.

In his semantic model, Parsons (1990) proposes and analysis in which the base of the derivation is an adjective. He argues that the intransitive forms in the alternation are related to an adjective (hence the name 'inchoatives'), and these verbs have the meaning of 'becomes Adj'. It is obvious that many verb pairs that take part in the causative alternation are derived from adjectives, like in the following example from Hungarian (3).

(3)   *fehér* 'white' - *fehéredik* 'becomes white' – *fehérít* 'make white'

Similarly to Parsons (1990), following the typological classification and investigation of Haspelmath (1993), Piñón (2001) argues that in contrast to L & R H's (1999) analysis, the

anticausative is not derived from the causative verb, instead both the causative and the anticausative variants are derived from the same root. In his analysis of the causative derivation, Piñón (2001) suggests a Y-model (4):

$$(4) \quad \text{Adj}_{\text{STAT}} \longrightarrow \text{V}_{\text{STEM}} \quad \begin{array}{c} \nearrow \text{V}_{\text{CAUS-INCHO}} \\ \searrow \text{V}_{\text{INCHO}} \end{array}$$
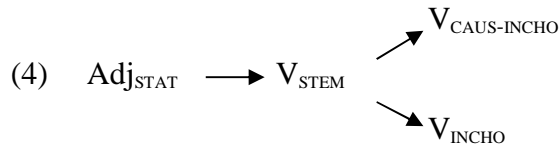
Piñón (2001) proposes a model of the alternation in which the basic idea is to semantically derive both the causative and the inchoative verb from a common stem that is semantically based on the stative adjective. This semantic model of the alternation can be translated into Marantz's (1997) syntactic analysis of roots (*Distributed Morphology*).

However, there is a difference between the three derivations (i.e. Parsons 1990, Piñón (2001) and Marantz (1997)). In Parsons' (1990) analysis the shared base is a relevant adjective, in Piñón's (2001) semantic model the starting base is the AdjSTAT, while in the Maranztian model (1997) both the non-causative and the causative verbs are deived from an uncategorized root.[42]

Recent works on the non-causative/causative alternation (e.g. Alexiadou 2006, Anagnostopoulou and Schäfer 2006 and Doron 2003, among others) follow the Marantzian model: the non-causative and causative variants are derived from the same uncategorized root. Alexiadou (2006), Anagnostopoulou and Schäfer (2006) and Alexiadou (2010) go futher than this, however, they propose that non-causative verbs are not a uniform group; they can have two different internal structures.

The Udmurt empirical data presented in the following paragraphs suggest that the latter account of the causative/non-causative alternation is on the right track. I will propose that non-causatives can indeed have two different syntactic structures.

2.2.2   *Typological classification of the causative alternation*

The causative alternation always involves two verbs, a transitive and an intransitive one, ordered in pairs. The classification of these verb-pairs is based on the absence or presence of a transparent morphological derivation and the direction of this derivation.

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[42]   I thank Huba Bartos for pointing out this difference to me.

Nedyalkov (1969) was the first who classified the alternation on the basis of the formal aspects of the variants. In his pioneering work, he divided the verbs first into three classes: i) causative, ii) anticausative and iii) non-directed alternation. The labile, equipollent and suppletive groups are the subclasses of the non-directed alternation.

This work was expanded in his later work with Silnitsky (Nedyalkov & Silnitsky 1973), where they investigated over 100 languages and they discovered four different oppositions. These oppositions are illustrated in their work with Russian verbs (5):

(5) *smejat'sja*   'laugh'   *smeshit*   'amuse, make laugh'

   kipet'   'boil, come to a boil'   *kipjatit'*   'boil, bring to a boil'

   goret'   'burn'   *zhech'*   'burn, ignite'

   perelomit'sja 'break, get broken in two' *perelomi'*   'break in two'

This classification has been followed by e.g. Comrie (1981) and Haspelmath (1993), as shown in (6).

(6)   a. *causative alternation*: the inchoative verb is the basic verb and the causative is marked by an affix, a causative auxiliary or stem modification

   b. *anticausative alternation*: the causative verb is the basic verb and the inchoative is marked by an affix, an anticausative verb or stem modification

   c. *labile alternation*: the same verb is used both in the inchoative and in the causative sense

   d. *equipollent alternation*: both the causative and the inchoative are derived from the same stem which expresses the basic situation by means of different affixes, different auxiliary verbs or different stem modification

   e. *suppletive alternation*: both have different verb roots

After the cross-linguistic overview of the causative alternation and the theoretical background, I shall turn to the properties of lexical causatives in Udmurt.

2.3   Lexical causatives in Udmurt

The typological classification of lexical causation in Udmurt is still an understudied area of research. There are two not very detailed studies that could be taken as a starting point for the

investigation: Haspelmath (1993) and Kozmács (2002). However, these works only list the types of the alternation without providing a deeper explanation for the phenomena at hand.

In his typological work on the causative/inchoative alternation, Haspelmath (1993) examined 31 languages from different language families. The Uralic family is represented by the Hungarian, Finnish and Udmurt languages. His typological classification follows Nedyalkov & Silnitsky (1973) and it is based on 20 alternating verb-pairs in each language, therefore it contains several errors. These mistakes were corrected by Kozmács (2002). The categorization of the alternation presented below is based on Kozmács (2002).

2.3.1 *Causative alternation*

In Nedyalkov & Silnitsky's (1973) classification, in the causative alternation the non-causative verb is the basic form and the causative is marked by a suffix.

(7) a. *sajka-ny*

сайка-ны

√wake-INF

'to wake up$_{NCAUS}$'

b. *sajka-**ty**-ny*

сайка-ты-ны

√wake-CAUS-INF

'to wake up$_{CAUS}$'

(8) a. *vyjy-ny*

выйы-ны

√sink-INF

'to sink$_{NCAUS}$'

b. *vyj(y)-**ty**-ny*

выйы-ты-ны

√sink-CAUS-INF

'to sink$_{CAUS}$'

In (7a) the non-causative verb *sajkany* 'to wake up' contains only a root (in the sense of Marantz 1984) and a null affix responsible for the verbal category (see Arad 2005). In (7b) the verb also contains the *-t-* inner causative affix. This morpheme is historically related to the productive causative marker *-t-* as in (9) and it also has a use as verbalizer as in (10) (A. Kövesi 1965).

(9) a. *Sasha gozhtetez gozht-iz.*

Саша гожтэтэз гожт-йз

Sasha.NOM letter.ACC write-PST.3SG

'Sasha wrote the letter.'

b. *Sasha   Mashajez   gozhtetez   gozhty-t-iz.*

Саша   Машаез   гожтэтэз   гожты-т-йз

Sasha.NOM Masha.ACC letter.ACC   write-CAUS-PST.3SG

'Sasha made Masha write the letter.'

(10) a. *Sasha   vamysh   ljog-iz.*

Саша   вамыш   лёгиз

Sasha.NOM   step.NOM   make-PST.3SG

'Sasha took a step.'

b. *Sasha   vamysh-t-iz.*

Саша   вамыш-т-йз

Sasha.NOM take.a.step-V-PST.3SG

'Sasha took a step.'

The non-causative verb takes a patient argument (11a) and its causative variant takes a causer and a patient (11b).

(11) a. *Pinaljos   sajka-zy.*

Пиналъёс   сайказы.

child.PL.NOM   wake.up-PST.3PL

'The children woke up.'

b. *Anaj   pinaljosyz   sajka-t-iz.*

Анай   пиналъёсыз   сайка-т-йз.

mother.NOM   child.PL.3PL.ACC wake.up-CAUS-PST.3SG

'The mother woke up the children.'

2.3.2   *Anticausative alternation*

Unlike in the causative alternation, in the anticausative alternation the causative verb is the basic form and the non-causative is marked by a suffix.

(12) a. *pi'li-s'ky-ny*   b. *pil'i-ny*

пили-ськы-ны   пили -ны

√break-NCAUS-INF   √break-INF

'to break_{NCAUS}'   'to break_{CAUS}'

(13) a. *us'ti-s'ky-ny*   b. *us'ty-ny*

усьтй-ськы-ны   усьты-ны

√open-NCAUS-INF   √open-INF

'to open_{NCAUS}'   'to open_{CAUS}'

As shown in (12a), the non-causative verb is marked by the *-s'k-* morpheme. Unlike in (7b), the causative verb has only a phonologically null verbal category marker in the sense of Arad (2005) and no overt causative suffix appears.

Similarly to non-causatives, the verbs without the *-s'k-* affix presented above in (10) and (11) also take a patient argument (14a), and their causative variants take a causer and a patient (14b).

(14) a. *Vaza*   *pil'i-s'k-iz.*

Ваза   пили-ськ-из

vase.NOM   break-NCAUS-PST.3SG

'The vase broke.'

     b. *Sasha*   *vazajez*   *pil-iz.*

Саша   вазаез   пил-из

Sasha.NOM vase.ACC   break-PST.3SG

'Sasha broke the vase.'

2.3.3   *Labile alternation*

In the so-called labile alternation, the same verb form is used both in the non-causative and in the causative interpretation.

(15) *kut-sky-ny*

кут-скы-ны

√begin-NCAUS-INF

'to begin'

It is important to note that in the labile alternation both verbs have a suffix (either the morpheme *-s'k-* or the morpheme *-t-*).

The argument structure of the two verbs is different, because the non-causative verb has only a theme argument (16a) whereas the causative has a theme and an agent (16b).

(16) a. *Urok   kut-sk-iz.*

Урок   кут-ск-из

class.NOM   begin-NCAUS-PST.3SG

'The class began.'

b. *Dyshetis'   urokez   kut-sk-iz.*

Дышетйсь   урокез   кут-ск-из

teacher.NOM   class.ACC   begin-NCAUS-PST.3SG

'The teacher started the class.'

2.3.4 *Equipollent alternation*

In the equipollent alternation, both the causative and the non-causative forms are derived from the same stem. The stem expresses the lexical meaning, and the alternation is signaled by means of different suffixes.

(17) a. *azyn-sky-ny*   b. *azyn-**t**y-ny*

азин-скы-ны   азин -ты-ны

√develop-NCAUS-INF   √develop-CAUS-INF

'to develop_NCAUS'   'to develop_CAUS'

Similarly to the other types, the argument structure of the two verbs is different: the non-causative verb has only a theme argument (18a) whereas the causative has a theme and an agent (18b).

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(18) a. *Kar   umoj   azyn-sk-e*.

      Кар   умой   азин-ск-е

      city.NOM   good   develop-NCAUS-PRS.3SG

      'The city develops well.'

   b. *Kivaltis'   programmajez   azyn-**t**-iz*.

      кивалтӥсь   программаез   азин-т-из.

      director.NOM program.ACC   develop-CAUS-PST.3SG

      'The director developed the program.'

In (18), both the non-causative and the causative verbs are derived from the root √*azyn-* 'develop' by suffixes.

2.3.5 *Suppletive alternation versus non-alternating verbs*

In the suppletive alternation, both variants have different verb roots and neither of them contains the causative or anticausative marker:

(19) a. *kuly-ny*   b. *vyjy-ny*

      кулы-ны   выйы-ны

      √die-INF   √kill-INF

      'to die'   'to kill'

While neither of the verbs has an additional affix, they have different argument structures. The non-causative has only a patient argument, while the causative has an agent and a theme argument.

(20) a. *Sasha   kul-iz*.

      Саша   кул-йз.

      Sasha.NOM die.PST.3SG

      'Sasha died.'

b. *Sasha   Mashajez   vyj-t-iz.*

Саша   Машаез   вый-т-йз.

Sasha.NOM Masha.ACC kill-CAUS-PST.3SG

'Sasha killed Masha.'

There are both causative and non-causative verbs which do not participate in the alternation and they do not have causative/non-causative variants. Based on their semantics, however, they belong either to the group of causative or to the group of non-causative verbs.

(21) a. *s'as'kaja-ny*   non-causative

сяськая-ны

√blosson-INF

'to blossom'

   b. *voz'ma-ty-ny*[43]   causative

возьма-ты-ны

√show-CAUS-INF

'to show'

Since the causative/non-causative alternation is defined as a systematic morphological relation between the verb forms taking part in the alternation, in the course of this work I do not consider the suppletive verb pairs to instantiate a type of causative/non-causative alternation. This contrasts with the traditional view of these pairs.

What is clear from the data above is that in Udmurt the suffix *-s'k-* is the productive non-causative suffix. Any root can combine with the non-causative suffix unless the root is not compatible with the non-causative meaning or the root takes a non-productive non-causative suffix. Similarly to the non-causative suffix, the productive causative marker, which is *-t-* in Udmurt, can attach to any root if the root is compatible with the causative meaning and there is no marked causative verb formation.

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[43]   It is important to note here that this form of *voz'matyny* is also the factitive form of the verb *vozhmany* 'to wait', so it also has the meaning 'to make somebody wait'. I assume that although historically there can be a relation between two verbs *voz'many* 'to wait' and *voz'matyny* 'to show', in the contemporary language there is no relation between them, they are not variants of each other.

To sum up: all the alternation types classified by Haspelmath (1993) can be found in Udmurt. The argument structures of the alternating verbs are related in the sense that the nominative argument of the non-causative variant with a patient or theme thematic role is always the Accusative marked argument of the transitive causative variant. This means that non-causative verbs are all unaccusative verbs with a deep object in their 'subject' position. Unergative verbs do not take part in the alternation in Udmurt.[44]

Nevertheless, in this thesis verbs belonging to the suppletive alternation are treated differently, because I assume that these verbs do not alternate in the sense of the causative/non-causative alternation. Instead, these pairs involve a transitive and an intransitive verb that are (syntactically or derivationally) unrelated to each other, and so they fall outside the scope of the chapter.

2.4 Internal structure

The main proposal in this section draws on work by Alexiadou (2006, 2010) and others: bare and morphologically marked causative and non-causative verbs have the same structure. Alexiadou et al. (2006), modifying Kratzer (2003), assumes the following core syntactic structure for all types of change of state verbs, causatives, non-causatives and passives (22):

(22)   [(Voice) [CAUS/v [Root + Theme]]]

The structure is built on a category-neutral root which is merged either with a verbalizer head (v) or a causative-verbalizer head (CAUS). Voice is a lexical head that introduces the external argument for any predicate (see Kratzer 1996, 2003) and merges with a vP/CAUSP layer.

2.4.1 *Distinguishing between passives and non-causatives*

Before turning to the decomposition of the verbs taking part in the causative alternation, the passive forms of the transitive verbs need to be distinguished from their non-causative counterparts. What passive and non-causative verbs have in common is the lack of an external

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[44]   This is not a universal property of languages. In has been shown cross-linguistically that unergative verbs can also have a causative transitive variant (cf. Pylkkänen 2002 for Japanese):

(i) *John-ga   kodomo-o   nak-ase-ta*
   John-NOM   child-ACC   cry-CAUS-PAST
   'John made the child cry.'

argument. This contrasts with the properties of transitive verbs derived from the same root. However, the difference relates to the presence of agentive features only in the former case (Alexiadou et al. 2006). This similarity is reflected by the empirical fact that there are languages where the passive marker can function as the non-causative marker as well. Traditionally, the difference is explained by the reduction of the arguments, since in the passive form of the transitive verb the agent is merely not explicit, whereas non-causative verbs have no agent or causer at all. According to Alexiadou et al. (2006), the difference between passives and non-causatives depends on the properties of the Voice head introducing the agent, and its combinations with the causer introduced by the Cause head and various types of roots.

This difference between passives and non-causative verbs has been studied extensively in languages like English (e.g. Manzini 1983, Marantz 1984, Reinhart 2000, Schäfer 2008, among many others). There are two differences between these types of verbs: i) modification or control, and ii) verb restrictions.

As far as modification is concerned, passives can be modified by i) *by*-phrases (23a), ii) agent-oriented adverbs (23b), and iii) they allow control into purpose clauses (23c). Non-causatives do not share any of these properties (23d-f):

(23) a. *The boat was sunk by Bill.*

   b. *The boat was sunk on purpose.*

   c. *The boat was sunk to collect the insurance.*

   d. **The boat sank by Bill.*

   e. **The boat sank on purpose.*

   f. **The boat sank to collect the insurance.*

(Schäfer 2008:116)

As for the *Verb Restriction*, all transitive verbs have a passive counterpart, but not all of them have a non-causative variant (24a-f).

(24) a. *The baker cut the bread.*

   b. *The bread was cut by the baker.*

   c. **The bread cut.*

   d. *Bill broke the glass.*

   e. *The glass was broken by Bill.*

f. *The glass broke.*

<div align="right">(Schäfer 2008:116)</div>

L & R H (1995) argue that in addition to the *Verb Restriction* there is also a *Selectional Restriction:* transitive verbs taking part in the alternation have a selectional restriction on their external arguments. This restriction can be formulated as follows (L & R H 1995, Reinhart 2000, 2002):

(25) The transitive verbs that cannot form anticausatives restrict their subjects to *agents* or *agents* and *instruments* and disallow *causers*.

<div align="right">(L & R H 1995:106)</div>

Comparing non-causative and passives in Udmurt is also motivated by the fact that the same morpheme, *-s'k-*, appears both in passives and in non-causatives .

In Udmurt, two suffixes, *-s'k-* and *-emyn,* can be used as passive markers.

(26) a. *Sasha   jyrs'ize   kuas'tiz.*
      Саша   йырсизэ   куасьтйз.
      Sasha.NOM   hair.ACC   dry.PST.3SG
      'Sasha dried his hair.'

    b. *Jyrs'i   kuas'ti-s'k-iz.*
       йырси   куасьтй-ськ-из.
       hair.NOM   dry-NCAUS-PST.3SG
       'The hair was dried.'

    c. *Jyrs'i   kuas't-emyn*
       йырси   куасьт-эмын.
       hair.NOM   dry-PASS
       'The hair was dried.'

The sentences in (26b-c) are both passive variants of the active sentence in (26a). The agent is optional in them; if it does appear, then it bears an INST marker:

(27) a. *Jyrs'i*   *kuas'ti-s'k-iz*   *Sashaen.*[45]

йырси   куасьтй-ськ-из   Саша-ен

hair.NOM   dry-NCAUS-PST.3SG   Sasha-INST

'The hair was dried by Sasha.'

b. *Jyrshi*   *kvast-emyn*   *Sashaen.*

йырси   куасьт-эмын   Саша-ен

hair.NOM   dry-PASS   Sasha-INST

'The hair was dried by Sasha.'

INST case is used as an agent marker only in passives; it never occurs with non-causatives:

(28)   a. **Context**: Masha was preparing for her wedding. All of her girlfriends were helping her on the big day. On the day before the wedding Masha made a list about which task will be carried out by which friend. Although she planned that Aljona would dry her hair, Aljona was late and so …

Jyrs'ijez   *kuas'ti-s'k-iz*   *Sashaen*   passive

йырсиез   куасьтй-ськ-из   Саша-ен

hair.3SG.NOM dry-NCAUS-PST.3SG   Sasha-INST

'Her hair was dried by Sasha.'

b. **Context**: Masha did not get up in time, so she was late for school. She took a shower but she did not have time to dry her hair. Luckily, it was a sunny day and by the time she got to school …

*Jyrs'ijez   *kuas'ti-s'k-iz*   *shundy-en*   non-causative

йырсиез   куасьтй-ськ-из   шунды-ен

hair.3SG.NOM dry-NCAUS-PST.3SG   sun-INST

'*Her hair was dried by the sun.'

---

[45]   It is important to note here that -*s'k*- passive constructions most likely reflect Russian influence in the language. Native-speakers always mention this when they meet such a construction.

The ability of the verb to control into purpose clauses is also a good test to tease apart passives and non-causative verb-formations. Evidence for the hidden agentivity of passives comes from the fact that they can be modified by purpose clauses (29).

(29) a. *Jyrs'i   kuas'ti-s'k-iz   med vyl' jyrs'i   oktet   les'toz.*
        йырси   куасьтй-ськ-из   мед выль йырси   октэт   лэсьтоз.
        hair.NOM   dry- NCAUS -PST.3SG   PRT new hair.NOM   style   make.FUT.3SG
        'The hair was dried to make a new hairstyle.'

   b. *Jyrs'i   kuas't-emyn med vyl' jyrs'i   oktet   les'toz.*
        Йырси   куасьт-эмын мед выль йырси   октэт   лэсьтоз.
        hair.NOM   dry-PASS   PRT new hair.NOM   style   make.FUT.3GS
        'The hair was dried to make a new hairstyle.'

This type of modification is not possible with non-causative verbs (30):

(30) **Jyrs'i   kuas'ti-s'k-iz   med vyl' jyrs'i   oktet   les'toz.*
        *йырси   куасьтй-ськ-из   мед выль йырси   октэт   лэсьтоз.
        hair.NOM   dry-NCAUS-PST.3SG   PRT new hair.NOM   style   make.FUT.3GS
        '*The hair dried to make a new hairstyle.'

The fact that agents are licensed in passives but not in non-causatives suggests that the difference between the two has to do with agentivity, thus agentivity and causation should be syntactically represented by distinct functional heads (see also Pylkkänen 2002, Alexiadou et al. 2006). The syntactic structure of Udmurt passive forms marked by *-emyn* or *-s'k-* contains a Voice head in the sense of Kratzer (1994); this head hosts the agent argument. The structure of passives is modelled in (31):

(31)

```
            VoicePASSIVE
            /        \
                  Voice
                 /      \
              v        -emyn/-s'k-
            /    \
        √root      v
```
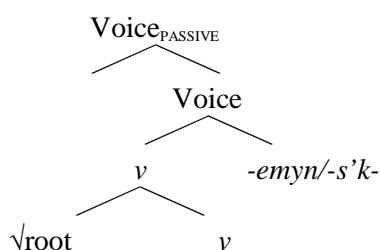
While the syntactic properties of the two passive forms seem to be similar, there is a morphological difference between the two markers. The morpheme *-s'k-* is an affix and it can function as a passive marker only with the 3rd person marker attached to it. The morpheme *-emyn*, on the other hand, is used without person markers and it is only used in past tense. Historically, *-emyn* can be decomposed into the *-em* participle ending and the *-yn* Inessive case marker.

This difference in the morphology leads us to investigate the *-s'k-* passive marker a little bit closer and assume an approach where *-s'k-* has a function that is somewhere between the active and the passive function.

2.4.2. *Half-passives vs. non-causatives: a parallel from Hungarian?*

It was already mentioned in the Introduction Chapter (subsection 1.3.2.2) that in their study of Udmurt impersonal constructions F. Gulyás & Speshilova (2014) argue for an account where the *-s'k-* constructions presented above are R-impersonals (in the sense of Siewierska 2011). R-impersonal means that the construction is impersonal with an indefinite or non-referential human Agent. These R-impersonal constructions in Udmurt have different syntactic properties than passives formed with *-emyn* (F. Gulyás & Speshilova 2014). For instance, they can appear in constructions where the object is marked with Accusative case. In these sentences the verb bears a 3rd person plural marker and the Agent can be expressed by a noun phrase bearing the Instrumental case.

(32) *Perepec/-ez   si-iskiz   (anaj-en)*
      perepech(NOM)/-ACC   eat-REFL.PST.3SG   mother-INST
      'The perepech was eaten (by the mother).'

<div align="right">(F. Gulyás & Speshilova 2014:9b)</div>

These R-impersonal constructions seem to be similar to Hungarian half-passive constructions observed by Márkus (2015).[46,47]

In Hungarian *-Ód* suffixation has two main functions: it is the default anticausative maker (33a) and it forms so-called half-passives (33b), as illustrated with the following examples.[48]

(33) a. *bonyol-ód-ik*

     complicate-ÓD-3SG

     'get comlicated'

   b. *el-felejt-őd-ik*

     PRT-forget-ÓD-3SG

     'get forgetten'

To see the similarity with R-impersonals, consider the definition of half-passive by Márkus (2015:47): 'Half-passives are used to downplay the contribution of an implicit causer.' A situation where it can be used is illustrated by Márkus (2015) with the following example:

(34) **Situation**: The owner of the red sludge reservoir is planning to get the dam damaged to collect money from the insurance company. His managing director is waiting for his instructions, but the owner finds out in the end that the damage would be significantly greater than what the insurance would cover. He calls his managing director to call off the action, and says: 'I have changed my mind, – the dam won't ....' ["*Meggondoltam magam, – nem fog(ja) .... a gát.*"]

   a. **át-szakít-ani   magát*

     PRT-rupture$_{CAUS}$-INF itself.ACC

     'rupture'

   b. *#át-szakad-ni*

     PRT-rupture$_{INCH}$-INF

     'rupture'

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[46] I thank Prof. Katalin É. Kiss for turning my attention to the work of Andrea Márkus and I am also thankful to Andrea Márkus, who made her unpublished doctoral thesis available for me.

[47] The term 'half-passive' used by Márkus (2015) comes from Nádasdy (2002).

[48] The suffixation *-Ód* is not the only way to derive anticausative verbs in Hungarian, although it is the only fully productive anticausative marker in present day Hungarian.

c. *át-szakít-ód-ni*

PRT-rupture_{CAUS}-ÓD-INF

'get ruptured'

<div align="right">(Márkus 2015:35)</div>

Márkus (2015) argues that the choice of the most acceptable version of the tree variants, which is example (34c), depends on the speaker's willingness to hide or minimalize his responsibility of damage.[49] This means that the *Ód*-type of half-passive is similar to passive verb formation, since there is an implicit causer which can never surface, not even in the form of a *by*-phrase (35). There are ways to express the agentive causer, however: it can appear in the preceding clause (36a) or as a locative phrase (36b).

(35) *A   három   kiló   meggy   és   cseresznye már   cukroz-ód-ik*

the   three   kilo   sour.cherry and   cherry   already sugar-ÓD-PRES.3SG

(*az apum által).

(the dad.MY by)

'Those three kilos of sour cherries and cherries are already getting sugared (*by my dad).'

<div align="right">(Márkus 2015:36a)</div>

(36) a. *Apum   nekiállt,   és   a   három   kiló   meggy   és   cseresznye*

dad.MY   buckled.down and   the   three   kilo   sour.cherry and   cherry

már   cukrozódik.

already sugar-ÓD-PRES.3SG

'My dad buckled down, and those three kilos of sour cherries and cherries are already getting sugared.'

b. *A   svédeknél csomó   minden   elpazarolódik -*

the   Swedes.AT bunch   everything waste-ÓD-3SG

egy kilós sajtot kidobnak mert egy kis penész van rajta.

'At the Swedes', a whole bunch of things get wasted – they throw out pounds of cheese because there is a little mold on them.'

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[49] For a detailed description of the situations where half-passives are used in Hungarian, see Márkus (2015).

That the agent cannot appear as a *by*-phrase is a property shared by half-passives and non-causative verb formations. Non-causatives and half-passives also share the property that both types are compatible with *from*-phrases.

(37) *szegénynek annyira megviselődik   a   rohadt cirkótól*

poor.DAT   so.much PRT-wear.out-ÓD-PRES.3SG   the   rotten   gas.boiler.FROM

az   idege

the   nerves.HIS

'the nerves of the poor guy get so worn out from that wretched gas boiler'

The semantic difference between the half-passive and the non-causative form is whether the speaker wants to hide the agent or the event described by the verb is happening by itself.[50] There are some tests which can help us to distinguish the ambiguous verb forms from each other. One of these tests consists in inserting an agent oriented adverbial such as 'intentionally' into the clause. Agent oriented adverbials are compatible with a hidden agent in the sentence, but they turn the sentence ungrammatical if the predicate is non-causative. Consider the following examples:

(38) a. **A   gát   szándékosan szak-ad-t   át.*

the   dam   intentionally rupture-INCH-PAST.3SG   PRT

Intended: 'The dam ruptured intentionally.'

  b. *A   gát   szándékosan szak-ít-ód-ott   át.*

the   dam   intentionally rupture-CAUS-ÓD-PAST.3SG PRT

'The dam got ruptured intentionally.'

If the verb form is ambiguous, the adverb triggers the half-passive reading of the predicate.

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[50] Márkus also shows morphological differences in Hungarian to distinguish half-passive and non-causative verbs from each other, but since morphology does not help in Udmurt, I skip this argument here and refer the reader to Márkus (2015).

(39) *Az   a   lámpa   szándékosan kapcsolódott   le?*

     that the lamp   intentionally turn.off-ÓD-PAST.3SG PRT

     'Was it intentionally that those lights got turned off?'

The phenomenon of syncretism can be defined as follows: two distinct grammatical functions or meanings are expressed by the same form (for recent analyses see e.g. Wiese 2004, 2005, Bobaljik 2006, 2012). In her study of *-Ód* suffixation in Hungarian, Márkus (2015) proposes a nanosyntactic analysis of the syncretism involving *-Ód*.

As argued by Márkus (2015), in Hungarian the non-causative and half-passive verbs formed by the suffix *-Ód* are in a syntactic containment relation. Half-passives involve more agency than non-causative constructions, which leads to the conclusion that half-passives syntactically subsume non-causative constructions.

Cross-linguistically, the syntactic constructions presented above both from Hungarian and Udmurt are similar to the well-known phenomenon of medio-passive constructions.[51,52] In languages such as (Modern) Greek, Latin and Syriac all the non-active verb formations (passives and middle verbs)[53] share the same morphology, as opposed to languages such as Classical Greek, Hebrew or Icelandic, where we can find two separate non-active forms of the verb. In addition, there are also languages such as English, in which middle verbs share the same morphology as active verbs and the passive is morphologically or syntactically marked differently.[54]

Alexiadou & Doron (2012) argue that in languages which distinguish active and middle voice, the middle voice derives anticausative, reflexive, dispositional-middle[55] and medio-passive verbs. The main property of middle voice is that it is does not require, but allows the presence of an external argument. The external argument must be existentially bound. The term medio-passive labels verbs denoting an event which happens on its own or is caused by an external argument. This meaning subsumes the meaning of both middles and the passives. Medio-passive verbs differ from passives, since in passives an external argument is always

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[51] In descriptive and typological studies the terminology 'middle voice' is used for this type of verb formation (see e.g. Geniušicné 1987, Kemmer 1993, Siewierska 1984).

[52] It is important to note here that Márkus (2015) argues for an account where the half-passives in Hungarian do not correspond 100% to medio-passive constructions. For the sake of simplicity I do not go further into her arguments here and refer the reader to Márkus (2015).

[53] Cross-linguistically, the following environments cluster together under non-active voice (Alexiadou & Doron 2012): anticausatives, reflexives, dispositional middles, medio-passives and passives.

[54] Udmurt seems to belong to the second group.

[55] The term dispositional middle refers to verb formations such as *cut* or *sell* in sentences like '*the bread cuts easily*' or '*this book sells well*'.

understood to be present and it is typically an active participant, whereas in medio-passives the external argument can be an agent/experiencer/location/cause (Alexiadou & Doron 2012).

For the syntactic representation of medio-passives, Alexiadou & Doron (2012) propose an approach based on Doron (2003). They assume that there are two separate non-active Voice heads: a middle Voice head and the passive Voice head. In the case of medio-passives the Voice head in the derivation is the middle Voice head.

Since medio-passive verb formation is beyond the scope of the thesis and the proper syntactic behavior of *-s'k-* passive constructions is not clear, I do not go deeper into Alexiadou & Doron's (2012) analysis of non-active voices (though I assume that their proposal is probably plausible for the Udmurt data).

2.4.3   *The structure of the alternating verbs*

As it was already mentioned at the beginning of this section, for the syntactic structure of the alternating verbs I adopt Alexiadou et al.'s (2006) assumption that bare and morphologically marked causative and non-causative verbs have the same structure. This is schematically illustrated in (40):

(40)   [(Voice) [CAUS/v [Root + Theme]]]

In the following paragraphs I will propose that the syntactic structure of non-causative and causative verbs are built in the same way, the only difference between the two types is whether they contain the CAUS projection for the causing event.

2.4.3.1   *Non-causative verbs*

As shown in the previous section, non-causative verbs have the following two types.

(41)   a. *Pinaljos   sajka-zy.*
           Пиналъёс   сайка-зы.
           children.PL.NOM wake.up-PST.3PL
           'The children woke up.'

b. *Vaza   pil'i-s'k-iz.*

Ваза   пили-ськ-из

vase.NOM   break-NCAUS-PST.3SG

'The vase broke.'

In (41a) the non-causative verb does not contain the morpheme *-s'k-*. In (41b), on the other hand, the morpheme *-s'k-* occurs in the verb.

The common property of non-causative verbs presented above is that they all lack an agent argument in their internal structure. Yet a causer argument can appear in the structure, and it can be i) a non-agent or ii) a causing event. However, an agentive causer is not acceptable. The verbs differ in how the causer is encoded in their argument structure.

I. Non-agentive causer:

Non-agentive causers are encoded in one of two ways in the argument structure: either with the ABL case *-les'* or with the postposition *seren* 'because of'.[56]

(42) a. *Pinaljos   gudyrjajem-les' sajkazy*

Пиналъёс   гудыръяем-лэсь сайказы.

child.PL.NOM thunder-ABL   wake.up.PST.3SG

'The children woke up from the thunder.'

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[56]   I assume that there is no syntactic difference between the ABL case *-les'* and the postposition *seren*. The marking mainly depends on the type of the NP: participles used as NPs are most frequently marked with *-les'* and NPs formed from verbs appear with the postposition:

i) a) *Sasha   vis'-em-les'   kyliz*
       Саша   вис-ем-лэсь   кылйз.
       Sasha.NOM   sick-PART-ABL   die.PST.3SG
       'Sasha died from the illness.'

    b) *Sasha   vis'on   seren   kyliz*
       Саша   висён   сэрен   кылйз.
       Sasha.NOM   sickness   because.of   die.PST.3SG
       'Sasha died from the illness.'

b. *Pyzh vyjiz uragan seren*
 Пыж выйиз ураган сэрен.
 boat.NOM sink.PST.3SG storm.NOM because.of
 'The boat sunk from the storm.'

c. *Vaza pil'iskiz skvozn'ak seren*
 Ваза пилиськиз сквозняк сэрен
 vase.NOM break.PST.3SG draft.NOM because.of
 'The vase broke from the draft.'

d. *Ös us'tis'kiz töl-les'*
 Öс усьтйськиз тöл-лэсь.
 door.NOM open.PST.3SG wind-ABL
 'The door closed from the wind.'

e. *Ty kynmiz kez'yt luem-les'*
 Ты кынмиз кезьыт луэм-лэсь
 lake.NOM freeze.PST.3SG cold be.PRT-ABL
 'The lake froze from the cold.'

II. Causing event:

Contrary to languages in which the non-agentive causer is encoded by specialized prepositional items or markers (e.g. Greek or German),[57] in Udmurt the causing events are also introduced by the ABL case or the postposition *seren*:

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[57] There are languages in which different causers are introduced by different PPs (Alexiadou & Schäfer 2006). Consider the following German examples:the non-causative verb *zerbrechen* 'break' can appear only with a causer (PP: *von*, *durch*) or a causing event (*durch*) but not with an agent (*von*) or an instrument (*mit*):

(i) *Die Vase zerbrach *von Peter /*vom Erdbeben / *mit dem Hammer*
 The vase broke by Peter / by the earthquake / with the hammer

(ii) *Die Vase zerbrach durch ein Erdbeben*
 The vase broke through an earthquake

(iii) *Die Luftqualität im Raum verschlechtert sich durch das Rauchen von Zigaretten massiv.*
 The air-quality in-the room worsens REFL through the smoking of cigarettes severely

(43) a. *Pinaljos   sajkazy   anaj-atajlen kopas'kemzy-les'*

     Пиналъёс   сайказы   анай-атайлэн копаськемзы-лэсь

     child.PL.NOM wake.up.PST.3SG   parents.GEN   fight-ABL

     'The children woke up from the fight of the parents.'

  b. *Pyzh   vyjiz   pydesys   pas'as'kem seren*

     Пыж   выйиз   пыдесыз   пасяськем сэрен

     boat.NOM   sink.PST.3SG bottom   hole   because.of

     'The boat sunk from the hole of the boat on the bottom.'

  c. *Vaza   pil'is'kiz   pinaljos   byz'ylem   seren*

     Ваза   пилиськиз   пиналъёс   бызьылэм сэрен

     vase.NOM   break.PST.3SG   children.PL   run   because.of

     'The vase broke from the running of the children.'

  d. *Ös   us'ktis'kiz   skvozn'ak-les'*

     Ӧс   усьтӥськиз   сквозняк-лэсь

     door.NOM   open.PST.3SG   draft-ABL

     'The door opened from the draft.'

  e. *Ty   kynmiz   omyr   kez'ytskem-les'*

     Ты   кынмиз   омыр   кезьытскем-лэсь

     lake.NOM   freeze.PST.3SG air.NOM cold.PRT-ABL

     'The lake froze from the cold of the air.'

III. Agent causer:

It was shown in the previous section that passives and non-causative constructions differ regarding their agentivity. Passives contain an implicit agent while non-causatives do not. Crucially, in Udmurt there are some non-causative verbs which appear with an agentive causer:

(44) a. ?*Pinaljos*   *anaj-les'*   *sajkazy.*

?Пиналъёс   анай-лэсь   сайказы.

child.PL.NOM   mother-ABL   wake.up.PST.3SG

'The children were woken up by the mother.'

(Lit. The children woke up by the mother.)

b. *Vaza*   *pil'iskiz*   *Sasha(en)*   *seren*

Ваза   пилиськиз   Саша(ен)   сэрен

vase.NOM   break.PST.3SG   Sasha.NOM/INST   because.of

'The vase was broken by Sahsa.'

(Lit. The vase broke by Sasha.)

c. *Ös*   *us'tis'kiz*   *Sasha*   *seren*

Öc   усьтйськиз   Саша   сэрен

door.NOM   open.PST.3SG   Sasha.NOM because.of

'The door was opened by Sasha.'

(Lit. The door opened by Sasha.)

It is important to note that the examples above – as well as other attested sentences not included in the thesis – show that only those non-causative verbs can co-occur with the agentive causer which are marked with the morpheme *-s'k-* .

The appearance of the agentive causer or an agent is not possible with non-causative or unaccusative verbs which do not take part in the alternation or do not have a transitive/causative alternant, as illustrated with the following examples.

(45) a. **Pinal*   *s'uriz*   *anaj*   *seren/*   *anaj-les'*

пинал   сюриз   анай   сэрен/   анай-лэсь

kid.NOM   appear.PST.3SG   mother.NOM   because.of   mother-ABL

*'The kid appeared by the mother.'

b. **kuara*   *chuzjas'ke*   *Sasha*   *seren/*   *Sashales'*

куара   чузъяське   Саша   сэрен/   Сашалэсь

voice.NOM   echo.PRS.3SG   Sasha.NOM because.of   Sasha-ABL

*'The voice echoes by Sasha.'

On the basis of the examples in (45) we can conclude that not all non-causative/unaccusative verbs allow the appearance of the agent in a *seren*-phrase in Udmurt.

For the internal structure of non-causative verbs, I follow Anagnostopulou & Schäfer (2006), Schäfer (2008) and Schäfer at al. (2014). In their proposal non-causative verbs are not uniform and their internal structure may differ. They argue that non-causative roots can have the requirement to appear in the presence of Voice (e.g. non-causative verbs with extra morphology (*sich*) in German), even if they express a non-causative event. In this case, a special kind of Voice is involved with no semantic content. The different syntactic structures are illustrated in (46):

(46) non-causative: [V [RootA + Theme]]   Ø

non-causative: [DPexpl.   [Voice{D, Ø }   [V [RootB + Theme]]]]   *sich*

causative: [DP   [Voice{D, Agent}   [V [RootA/B + Theme]]]] transitive

(Schäfer et al. 2014)

Following Kratzer's (1996) proposal that Voice is responsible for introduting the external argument, Alexiadou (2010) argues that in the case of non-causatives with special Voice morphology, the Voice projection is specified as [–external argument] and [–agentivity] (47).

(47) [Voice (–ext. arg. –AG) [v [Root]]]

Since in Udmurt non-causative verbs can optionally license a causer argument with a [±agentive] feature, I assume that Voice appears also in the internal structure of non-causative verbs, similarly to the structure of German non-causatives with extra morphology (*sich*), and the specifier position of VoiceP hosts the causer DP with a [–external argument] feature.

Based on the empirical data, I propose that non-causative verbs have two different structures (48a-b).

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(48)   a.

```
                    VoiceP
                   /      \
        [-ext. arg.       Voice'
           -AG]          /      \
                       vP        Voice
                      /  \       Ø/-s'k-
                          v'
                        /    \
                   √rootP      v
```

b.

```
                    VoiceP
                   /      \
        [-ext. arg.       Voice'
           -AG]          /      \
                 vP_TRANSITIVE   Voice
                    /    \       Ø/-s'k-
                   v'_TRANSITIVE
                  /        \
               vP           -t-/Ø
              /  \
                  v'
                /    \
           √rootP      v
```
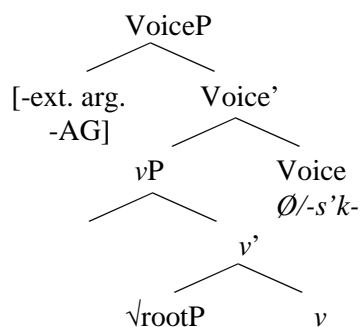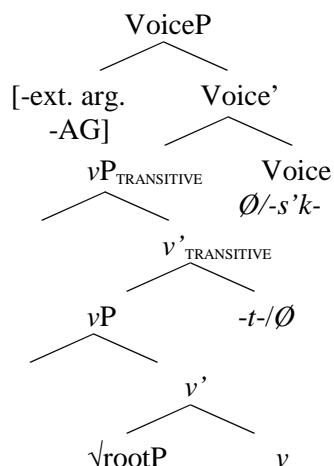
I suggest that non-causative verbs that cannot appear with an agentive causer (e.g. *sajkany* 'to wake up') have the structure in (48a). Those that can appear with an agentive causer have the structure in (48b). These verbs have an extra layer, and this layer is responsible for the agentivity of the causer.

2.4.3.2   Causative verbs

As observed above, causative verbs can be divided into two groups on the basis of whether they contain the morpheme *-t-* or not:

(49)   a. *Anaj*   *pinaljoszy*   *sajka-t-iz*.

Анай   пиналъёсыз   сайка-т-йз.

mother.NOM   childen.PL.ACC.3PL   wake.up-CAUS-PST.3SG

'The mother woke up her children.'

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b. *Sasha*   *vazajez*   *pil-iz.*

Саша   вазаез   пил-из

Sasha.NOM vase.ACC   break-PST.3SG

'Sasha broke the vase.'

In spite of this fact, however, all causative verbs have the same argument structure, and the causer can be: i) an agent, ii) a causing event and iii) a non-agentive causer:

(50)   a. *Anaj*   *sajka-t-iz*   *pinaljosty*   agent

Анай   сайка-т-йз   пиналъёсты

mother.NOM wake.up-CAUS-PST.3SG child.PL.ACC

'The mother woke up the children.'

    b. *Gudyrjajem*   *sajka-t-iz*   *pinaljosty*   non-agent

Гудыръяем   сайка-т-йз   пиналъёсты

thunder.NOM   wake.up-CAUS-PST.3SG child.PL.ACC

'The thunder woke up the children.'

    c. *Anaj-atajlen*   *kopas'kemez*   *sajka-t-iz*   *pinaljosty*   causing event

анай-атайлэн копаськемез   сайка-т-йз   пиналъёсты

parents.GEN   fight.3SG   wake.up-CAUS-PST.3SG child.PL.ACC

'The fight of the parents woke up the children.'

Based on these properties, I propose the following syntactic structure for the causative variants of the alternation (51b):

(51)   a. √root + v + Cause + Voice

b.

```
                    VoiceP
                   /      \
         [-ext. arg.      Voice'
           ±AG]          /      \
                    CauseP       Voice
                   /      \
                 vP        Cause'
                /  \      /      \
              v'         Ø/-t-
             /  \
         √root    v
```
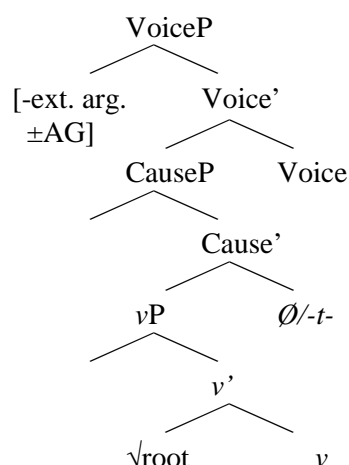
Unlike non-causative verbs, causative verbs are associated with a Cause head that hosts the causing event. Adopting Pylkkänen's (2002, 2008) approach to causatives, it is the *Selection parameter* which regulates which head is selected by Cause.[58] It is obvious that in the case of lexical causation Cause selects a *v*P containing only an internal argument and no external argument. In the case of causative verbs, the external argument is the causer, and following Kratzer's (1994) assumption that the external argument always appears in the [Spec,VoiceP] position, I propose that the causer argument sits in [spec, VoiceP] and it can have either a [+Agentivity] or a [–Agentivity] feature.

In accordance with Pylkännen's (2002, 2008) *Bundling parameter*, this means that Udmurt, similarly to Japanese or Haiki (Tubino Blanco 2011), for instance, is a non-voice-bounding language. Evidence for the separate Voice head and Cause head comes from the fact that causative transitive verbs can be passivized:

(52) a. *Anaj*   *sajka-t-iz*   *pinaljosty*
     Анай   сайкатӥз   пиналъёсты
     mother.NOM   wake.up.CAUS.PST.3SG child.PL.ACC
     'The mother woke up the children.'

---

[58] As introduced in section 1.4.3, Pylkkänen's (2002, 2008) analysis of causatives is based on two main parameters, the Voice-Bounding parameter and the Selection parameter. These two binary parameters are independent of each other, and their settings determine the syntactic behavior of different types of causatives in languages. However, contrary to Pylkkänen's assumptions, it is assumed in this work that lexical causatives are only *v*P-selecting and root-selecting causatives do not exist in Udmurt.

   b. *Pinaljos*   *sajka-t-emyn*   *(anajen)*

       пиналъёс   сайка-т-эмын   анаен

       child.PL   wake.up.CAUS.PASS   mother.INST

       'The kids were woken up (by the mother).'

As shown by the data, in the passive sentence the agent DP *anaj* 'the mother' is optional and it is encoded with INST case, which is typical in passivization. The structure of the passive sentence is illustrated in (53):

(53)
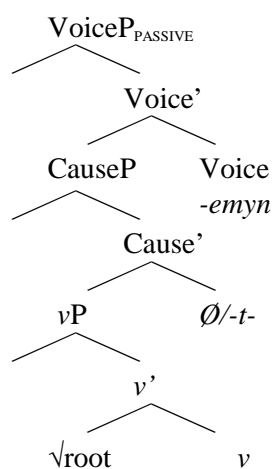
2.4.4   *True inchoative verbs*

It is a crucial observation in Udmurt that there is more than one productive process that forms non-causative and causative verbs from adjectives. There are languages like Hungarian, where the process is systematic. Consider the following examples from Hungarian:

(54) a. *kék* 'blue' - *kékít* 'make blue' - *kékül* 'become blue'
     b. *kész* 'ready' - *készít* 'make ready' - *készül* 'become ready'

(55) a. *fehér* 'white' - *fehérít* 'make white' - *fehéredik* 'become white'
     b. *színes* 'colorful' - *színesít* 'make colorful' - *színesedik* 'become colorful'

As shown by (54) and (55), Hungarian non-causatives have two different markers, *-Vl* and *-Vdik*. According to Bartos (2013), their structure is the following:

(56)

```
              v
           ╱     ╲
        v           a
                 ╱    ╲
              a        √root
```
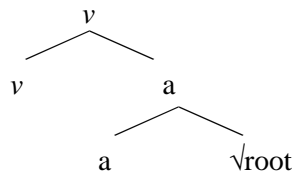
In the above structure, the root is merged with an *a* head that categorizes the root in the sense of Arad (2005), and then a *v* head hosting the verbal morphology is merged, creating a verbal category.

Unlike inchoatives, causative verbs have only one productive marker (*-ít*) that can be systematically attached to adjectives. The causative verbs have the following structure (Bartos 2013):

(57)

```
         C-INT
       ╱       ╲
   C-INT          v
               ╱     ╲
            v           a
                     ╱    ╲
                  a        √root
```
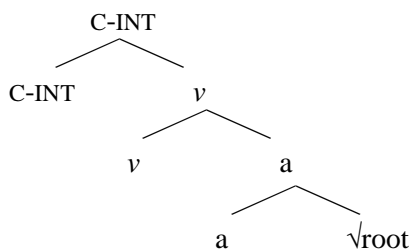
As we can see from the structure presented in (57), causatives derived from adjectives have two functional heads above the *a* head: the *v* head that forms a verb from the adjective and the C-INT head which encodes inner causation, as opposed to inchoatives.

In Udmurt, inchoative/causative verbs are derived in the following ways:

(58)		Adjective	Causative	Inchoative
	a.	*lyz*	*lyz-my-ty-ny*[59]	*lyzma-s'ky-ny*
		лыз	лыз-мы-ты-ны	лыз-ма-ськы-ны
		blue	blue-V-CAUS-INF	blue-V-NCAUS-INF
		'blue'	'make blue'	'become blue'

---

[59] The causative has another form as well: *lyztytyny.*

b. *das'*   *das'-a-ny*   *das'-a-s'ky-ny*

    дась   дас-я-ны   дас-я-ськы-ны

    ready   ready-V-INF   ready-V-NCAUS-INF

    'ready'   'make ready'   'become ready'

c. *kös*   *kös-a-ty-ny*   *kösany*

    кӧс   кӧс-а-ты-ны   кӧс-а-ны

    dry   dry-V-CAUS-INF dry-V-INF

    'dry'   '(make) dry'   '(become) dry'

The data presented in (58) illustrate the productivity of all the derivations, as shown in the previous sections. Inchoative verbs can be morphologically marked, as shown in (59a) and they have the syntactic structure presented in (59b):

(59) a. √root + a + v + Voice

      b.
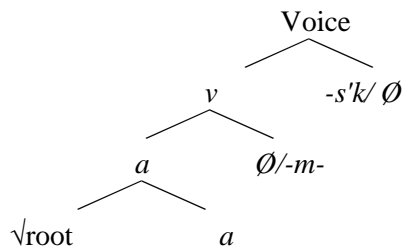
In the above structure, both *v* and Voice can be phonologically overt or covert.

    Causative verbs are derived in the following way:

(60) a. √root + a + v + Cause

      b.
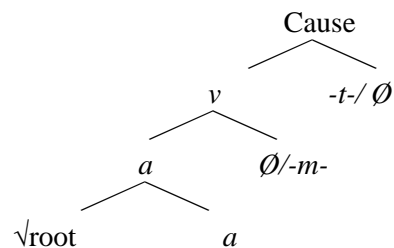
The structure, similarly to the structure inchoatives, contains an *a* head and a *v* head, but the head attached to v is a Cause head which introduces the causing event. The external argument is in spec,VoiceP (not modelled in (60)).

2.4.5 *Nominalization*

The nominalization of the alternating verbs is also an interesting topic that has been in the center of research related to the causative/non-causative alternation. Research in the domain of nominalization has shown that the derived nominal preserves the original argument structure of the verbs, however, the case of the internal arguments changes.

2.4.5.1 The realization of the external argument

In the case of the non-causative/causative alternation, Pesetsky (1995) argues that causatives that do not alternate produce grammatical transitive derived nominals, but verbs which occur in the inchoative/causative alternation do not produce transitive derived nominals.

(61)   a. *Bill's cultivation of tomatoes*
       b. **Tomatoes cultivated*

(62)   a. **Bil's growth of tomatoes*
       b. *Tomatoes grew*

Contrary to Pesetsky (1995), Harley & Noyer (2000) argue that alternating verbs do produce transitive derived nominals as long as the external argument can be construed as a direct cause:

(63)   a. *the balloon exploded*
       b. *the balloon's explosion*
       c. *the army exploded the bridge*
       d. *the army's explosion of the bridge*

Similarly to Harley & Noyer (2000), Alexiadou & Schäfer (2007) also analyze nominalizations and they assume that the nominalizations of the alternating verbs behave like

their verbal counterparts, with one major difference, namely the ambiguity of the intransitive variant:

(64) a. *John's breaking of the vase*

b. *the breaking of the vase (by John/by the wind)*

c. *John's accumulation of wealth*

d. *the accumulation of wealth (by John)*

The realization of the external argument in the construction is usually licensed in one of two different ways: i) as a possessor[60] (65a) or ii) as a PP (65b) (Alexiadou & Schäfer 2007):

(65) a. *John's destroying the manuscript*

b. *the destruction of the manuscript by John*

Kratzer (1994) and Marantz (1997), among others, argue that the external argument is hosted by VoiceP, as shown above. Since nominals derived by suffixes like *-(at)ion* in English lack Voice, their external argument is realized as a possessor rather than as an agent. When the nominalization structure includes Voice, the external argument is realized obligatorily, as in German, for instance (Alexiadou & Schäfer 2007):

(66) a. *die Öffnung der Tür durch Peter*

the open-ung the-GEN door through Peter

'the opening of the door by Peter'

b. *die Öffnung der Tür durch den Wind*

the open-ung the-GEN door through the wind

'the opening of the door by the wind'

2.4.5.2 *Nominalization in Udmurt*

In contemporary Udmurt, there are two suffixes, *-on/n* and *-em/m,*[61] that function as nominalizers:

---

[60] The possessor position is not available in all languages and in all types of DPs. In German, for instance, only proper names can appear in this position (Alexiadou & Schäfer 2007).

(67) a. *veras'ky-ny*   'to talk' -->   *veras'k-on* 'talking'

    b. *kuly-ny*   'to die' -->   *kul-em*   'death'

As Winkler (2001, 2011) observes, in nominalization the derived nominals preserve their verbal properties.

In the case of alternation, the evidence for the presence of Voice is similar to what was shown with non-causative verbs: the external argument appears as a PP. Consider the following examples in (68):

(68) a. *Sasha   vazajez   piliz.*

    Саша   вазаез   пил-из

    Sasha.NOM vase.ACC   break-PST.3SG

    'Sasha broke the vase.'

    b. *Sasha   seren   vaza   pyl'on*

    Саша   сэрен   ваза   пилён

    Sasha.NOM   because.of   vase.NOM   break.NOMIN

    'Sasha's destroying of the vase'

    c. *töl   seren   vaza   pyl'on*

    тöл   сэрен   ваза   пилён

    wind.NOM   because.of vase.NOM   break.NOMIN

    'the wind's breaking of the vase'

As shown by (68), in the nominalized construction the external argument appears as a PP with the postposition *seren* 'because of'. This postposition is used in passives, too, and it also introduces the non-obligatory agent/causer argument of non-causative verbs into the sentence (see section 2.4.1).

---

[61]   The choice of the allomorphs is based on the final vowel of the root: verbs with *-y* as the final vowel are marked with the *-on* and *-em* allomorphs, while verbs ending in *-a* are marked only with the consonantal variant of the suffix (Winkler 2011):

  (i) *veras'k-y-ny* -->   *veras'k-on, vera'k-em*
  (ii) *ver-a-ny*   -->   *vera-n, vera-m*

Similarly to non-causatives, in the nominalization the external argument can be either a non-agentive (68c) or an agentive causer (68b), and both are introduced with the postposition *seren* 'because of'.

2.5   Summary

In this chapter I discussed new empirical data of the causative/non-causative alternation in Udmurt. In my proposal, the alternation takes place in syntax rather than in the lexicon. Using the framework of *Distributed Morphology* (Marantz 1995, Arad 2005), I suggested that both causative and non-causative verbs are derived from roots in the course of Narrow Syntax.

Causative verbs contain either the overt causative morpheme *-t-* or a phonologically null suffix, while non-causative verbs can have a phonologically null suffix or the non-causative morpheme *-s'k-*.

The syntactic structures of the alternants differ in size: causative verbs contain an extra layer, the CauseP, which introduces the causing event. As argued in the chapter, the causer is not necessarily agentive, and so the Cause head attached to vP can bear either the [–Agentivity] or the [+Agentivity] feature. The structure of non-causative verbs lacks the Cause layer; it contains only the verbalizer layer and VoiceP (the latter introduces the external argument).

Interestingly, some non-causative verbs allow an agentive causer (a property that has not been observed for non-causatives cross-linguistically). I suggested that the structure of these verbs contains an extra layer that can host the agent causer.

CHAPTER 3

Factitive Causatives

3.1   Introduction

Cross-linguistically, factitive causatives can be formed both morphologically and periphrastically. In these constructions the causer alone is responsible for the causing event; and the two events of the construction, the causing event and the basic event, are clearly visible. The semantics of factitive causative constructions is predictable, conveying the basic meaning 'causer causes that S'.

In morphological causatives a morpheme is attached to the verb and this morpheme transforms the verb into a causative verb form. Morphological causatives are productive in agglutinative languages; in these languages the causative marker can be attached to all types of verbs.

Periphrastic factitives express the same meaning syntactically, in a productive way, by placing a causative verb such as *make,* in front of a phrase headed by the verb that would serve as the stem for derived causative formation in morphological languages.

As has already been mentioned, in the framework of *Distributed Morphology* (Halle & Marantz 1994), a unified syntactic account is proposed for all types of causative formations. Syntactically, the morphologically marked causative event is introduced in a functional head which is the head of CauseP. Following the Marantzian idea of a unified syntactic derivation, based on the approach presented in the previous chapter on inner causative constructions, a similar syntactic structure is assumed for factitive causatives. The causative event is realized as a Cause head. It is a Phase-selecting head in the sense of Pylkkänen (2002, 2008), because it selects a VoiceP with [+EA] and [±AG] features.

The rest of this chapter is organized as follows. Section 3.2 focuses on the causative morpheme, listing its descriptive properties in the diachronic and the synchronic grammar of the Udmurt language. Section 3.3 deals with the crucial syntactic properties of productive causative constructions in the language. In section 3.4 the appearencec of the suffix *-ez/jez* on the causee argument is in the center. Section 3.5 presents a syntactic approach to factitives in

Udmurt based on Pylkkänen (2002, 2008). In section 3.6 I discuss number of events and clausal domains in morphological causatives. Section 3.7 closes this chapter.

3.2 The causative morpheme in Udmurt

It was shown in the previous chapter that the causative variant of the causative/non-causative alternation is marked either with a phonologically null variant or the morpheme *-t-* in today's Udmurt. This causative morpheme also functions as the productive causative morpheme in the language.

As I will argue though this chapter, when this causative suffix serves as a factitive marker, it is hosted in the head of the CauseP introducing the factitive causing event into the derivation.

3.2.1 *The history of the -t- morpheme in a nutshell*

The Udmurt causative marker *-t-* originates from the Proto-Uralic language.[62] The reconstructed form of the morpheme is *-tt-* (A. Kövesi 1965), but some researches argue for *-t-* or even *-kt-* forms (Mikola 1995, 1999), and the morpheme probably already had a causative function in the Proto-Uralic language. Corresponding morphemes of the reconstructed *-t-/-tt-* can be found in Hungarian, Khanty, Komi and in the Nenets languages (Dolovai 2006).

Based on the different functions of the corresponding morphemes in the contemporary Permic languages (Komi, Komi-Permyak and Udmurt), the Proto-Permi[63] morpheme had at least four different functions depending on the nominal/verbal properties of the roots it attached to, and among these functions the morpheme already had a use as a transitive-causative and productive causative morpheme when attached to a verbal root (Lytkin 1957, A. Kövesi 1965).

It is interesting to note that in the Komi language the equivalent of the Udmurt causative morpheme is also *-t-*, but it is used only with causative-transitive verbs (Budenz 1884-1894, Lehtisalo 1936). The causative morpheme in Komi is a *-d-* affix, and it originates from a *-nt* suffix (Lytkin 1957).

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[62] Proto-Uralic is the reconstructed proto language of the Uralic language family. The Proto-Uralic period lasted between 7000BC and 4000 BC in a small area around the Ural Mountains.

[63] Proto-Permi is the reconstructed proto language of the Permic branch of the Uralic language family. The division of the Permic languages took place around 800 AD.

3.2.2 *Synchronic description of the -t- morpheme*

In contemporary Udmurt, external causative predicates are marked with the causative morpheme *-t-*,[64] as mentioned in the Introduction Chapter. This morpheme can be attached to unergative (1a) and transitive verbs (1b) to form factitives (GSzUJa 1962, Kozmács 1994):

(1) a. *Masha   Sasha-jez   uzha-t-iz.*

  Маша   Саша-ез   ужа-т-йз.

  Masha-NOM   Sasha-ACC work-CAUS-PST.3SG

  'Masha made Sasha work.'

  b. *Masha   Sasha-jez   kńiga-jez   lydzhy-t-iz.*

  Маша   Саша-ез   книга-ез   лыдӟы-т-йз

  Masha-NOM   Sasha-ACC book-ACC   read-CAUS-PST.3SG

  'Masha made Sasha read the book.'

As shown in Chapter 2 (Lexicalized Causatives), the *-t-* morpheme attached to an unaccusative verb results in the causative transitive variant of the causative/non-causative alternation:

(2) a. *Pinaljos   sajkazy.*   non-causative

  Пиналъёс   сайказы.

  child.PL.NOM   wake.up.PST.3PL

  'The children woke up.'

  b. *Anaj   pinaljosyz   sajkatiz.*   causative

  Анай   пиналъёсыз   сайкатйз.

  mother.NOM   child.PL.ACC.3PL   wake.up.PST.3SG

  'The mother woke up the children.'

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[64] Research on the causative suffix in Udmurt is still limited. The suffix was mentioned for the first time in the grammar of F. J. Widemann (*Grammatik der wotjakischen Sprache nebst einem kleinen wotjakisch-deutschen und deutsch-wotjakischen Wörterbuche,* 1851: 119-121). Following this work, the morpheme is mentioned in the works of V. I. Lytkin (1957), I. A. Kotovka (1993), E. A. Cipanov (2005), N. V. Kondratjeva (2009) and in two grammars: GSUJa (1962) and R. Bartens (2000), among others.

It is possible to attach the causative morpheme to the verb in all of the grammatical tenses:

(3)   a. *Masha*   *Sasha-jez*   *uzha-ty-l-iz.*   Future tense

Маша   Саша-ез   ужа-ты-л-йз.

Masha.NOM   Sasha-ACC work-CAUS-FUT-3SG

'Masha will make Sasha work.'

   b. *Masha*   *Sasha-jez*   *uzha-t-iz.*   Past tense

Маша   Саша-ез   ужа-т- йз.

Masha.NOM   Sasha-ACC work-CAUS-PST.3SG

'Masha made Sasha work.'

   c. *Masha*   *Sasha-jez*   *uzha-t-emyn.*   II. Past tense

Маша   Саша-ез   ужа-т-эмын.

Masha.NOM   Sasha-ACC work-CAUS-II.PST

'Masha had made Sasha work.'

It is also possible to combine the causative morpheme with the morphological marker of mood:

(4)   *Masha*   *Sasha-jez*   *uzha-t-y-sal.*   Conditional

Маша   Саша-ез   ужа-т-ы-сал.

Masha.NOM   Sasha-ACC work-CAUS-EP-COND

'Masha would make Sasha work.'

3.3   The arguments of the factitive causative

As shown in (1), in the case of both unergative and transitive verbs, the complex verbal form with the causative morpheme involves an additional argument: the causer of the causing event, which is a non-core argument. In the case of (1a), the base intransitive verb has become transitive and the original argument – the external argument – is marked as a direct object with Accusative case, following the direct object marking rule in Udmurt. This is a universal property of the causative form of an intransitive verb. Consider, for instance, the following Hungarian examples (5a-b):

(5)   a. *János   énekel.*

       John.NOM   sing.PRS.3SG

       'John is singing.'

    b. *Mari   énekel-tet-i   János-t.*

       Mary.NOM   sing-CAUS-3SG.DEF   John-ACC

       'Mary is making John sing.'

Since the new argument introduced by the causing event, that is, the causer, is the most prominent argument, it is always this argument that is encoded with NOM. The external argument of the base event, that is, the causee, is encoded in the new structure with ACC.

Turning to morphological causatives with a transitive base, they have some special properties which are observed by Kozmács (1994). The case marking of the causee plays the main role, in the following sections these syntactic properties will be presented in detail.

3.3.1   *Double-object constructions*

Cross-linguistically, in the argument structure of a causative with a transitive base, the causee is encoded with an oblique (henceforth: OBL) case (Comrie 1981). This case can be DAT, as in the Turkish example in (6), or INST, as in the Hungarian example in (7).

(6)   *çocuk   köpe-e   kedi-yi   kovala-t-tı*

    child.NOM   dog-DAT   cat-ACC   chase-CAUS-PAST

    'The child made the dog chase the cat.'

                            (Özlem et al 2008:2b)

(7)   *Péter   fel-olvas-tat-t-a   a   könyv-et   Mari-val.*

    Peter.NOM   up-read-CAUS-P.ST.3SG.DEF   the   book-ACC   Mary-INST

    'Peter made Mary read the book.'

This is consistent with Comrie's (1981) hierarchy: Subject (S) > Direct Object (OB) > Indirect Object (IO) > Oblique Object (OBL).[65] According to his hierarchy, the causee argument in the structure takes the most prominent empty syntactic position, which is the position of the indirect object in the case of a transitive verb, and as an indirect object, it is assigned DAT. But there are counterexamples, as illustrated with Hungarian (7) or with Umdurt (8).

Contrary to Comrie's hierarchy, transitive based causatives in Udmurt yield a double-object argument structure (8).[66]

(8) *Masha*   *Sasha-jez*   *kńiga-jez*   *lydzhy-t-iz.*
     Маша   Саша-ез   книга-ез   лыдӟы-т-йз
     Masha.NOM   Sasha-ACC   book-ACC   read-CAUS-PST.3SG
     'Masha made Sasha read the book.'

According to Baker (1985), in true double accusative languages, ditransitive verbs can assign structural case to more than one NP that they govern, and both NPs exhibit object-like behavior. Since in these languages non-derived verbs can assign ACC case to two NPs, it is not surprising that in a transitive based causative they can do the same. But Udmurt is not a true double accusative language, as this double-object structure is not well-formed in the case of non-derived ditransitive predicates such as 'give' (9).

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[65]   It follows from Comrie's (1981) hierarchy that the most prominent case for the causee argument is DAT, and as Comrie argues, the causee bears this case in most languages indeed. Mikola (1999) claims that Uralic languages, except for Finnish and Hungarian, show the same phenomenon.

[66]   It is important to note that forming these double-object constructions seems to be problematic for native speakers. They seem to avoid these constructions, and choose to form periphrastic causatives or to encode the causee with INST case instead. However, double-object structures are frequently used in the literature.

(9) a. *Sasha*   *Masha-ly*   *kńiga-jez*   *s'ot-iz.*

Саша   Маша-лы   книга-ез   сёт-йз.

Sasha.NOM Masha-DAT   book-ACC   give-PST.3SG

'Sasha gave the book to Masha.'

b. **Sasha*   *Masha-jez kńiga-jez   s'ot-iz.*

*Саша   Masha-ез   книга-ез   сёт-йз.

Sasha.NOM Masha-ACC book-ACC   give-PST.3SG

'Sasha gave Masha the book.'

However, there are two sentence types for which descriptive grammars assume two objects in one clause. Kondratjeva (2002, 2010) and Salminen (2006) mention that double-object constructions can appear in Udmurt with verbs like *bas'tyny* 'take' or *shuyny* 'to say' (10):

(10) a. *Sasha*   *Masha-jez*   *kyshno*   *bas't-iz.*

Саша   Маша-ез   кышно   басьт-йз

Sasha-NOM   Masha-ACC   wife.NOM   take-PST.3SG

'Sasha married Masha.'

b. *Al'i*   *ta*   *shur-ez*   *tuganaj*   *shuo.*

Али   та   шур-ез   Туганай   шуо.

now   this   river-ACC   tuganaj.NOM say.PRS.3PL

'Now this river is called Tuganaj.'

(Salminen 2006:10)

I suggest, contrary to Salminen's (2006) and Kondratjeva's (2002, 2010) assumptions, that there are no double-object constructions in Udmurt with transitive predicates like *bas'tyny* 'to take' or *shuyny* 'to say'. These predicates do not license two ACC cases on their complement DPs in the same clause either. The two DPs stand in two different clauses. The double-object constructions mentioned in Salminen (2006) and Kondratjeva (2002, 2010) are all secondary predications containing a small clause. When the Small Clause is selected by the matrix verb, the AP/NP predicate can be marked with a nominative marker (or it can be unmarked). If the Small Clause is attached as an adjunct, the AP/NP predicate is marked with ILL/INST case.

I assume that Udmurt verbs, including ditransitive verbs and predicates like *bas'tyny* 'to take' or *shuyny* 'to say', are not able to assign two ACC cases.[67]

3.3.2 *The order of the arguments*

Kozmács (1994) has shown that in addition to the case-marking of the arguments, causative constructions have another interesting property, too, namely the order of the two Accusative marked arguments. If the animacy features of the arguments are different, the order is variable, just like in the following example, where the patient has a [+animate] feature and the theme has a [–animate] feature (11):

(11) *Sasha*   *Masha-jez*[patient] *kńiga-jez*[theme] *lydzhy-t-iz.*
Саша   Маша-ез   книга-ез   лыдӟы-т-йз
Sasha.NOM Masha-ACC book-ACC read-CAUS-PST.3SG
'Sasha made Masha read the book.'

The thematic roles are still clear when we change the order of the arguments (12).

(12) *Sasha*   *kńiga-jez*[theme] *Masha-jez*[patient] *lydzhy-t-iz.*
Саша   книга-ез   Маша-ез   лыдӟы-т-йз
Sasha.NOM book-ACC   Masha-ACC   read-CAUS-PST.3SG
'Sasha made Masha read the book.'

This derives from semantics and pragmatics, because the [±animate] value of the arguments makes the situation clear: the [+animate] argument will be the patient and the [–animate] argument the theme. But unlike in the previous cases, the order cannot be changed if we have two [+animate] DPs in the sentence (13a-b): in this case the patient has to precede the theme.

(13) a. *Sasha*   *Masha-jez*[patient] *Ivan-ez*[theme] *zhugy-t-iz.*
Саша   Маша-ез   Иван-ез   жугы-т-йз
Sasha.NOM Masha-ACC   Ivan-ACC   hit-CAUS-PST.3SG
'Sasha made Masha hit Ivan.'

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[67] For a more detailed discussion of Small Clauses in Udmurt see Appendix on page 166.

b. *Sasha   Ivan-ez[theme] Masha-jez[patient] zhugy-t-iz.*

    Саша   Иван-эз   Маша-ез   жугы-т-йз

    Sasha.NOM Ivan-ACC   Masha-ACC   hit-CAUS-PST.3SG

    'Sasha made Masha hit Ivan.'

Since the animacy feature of the arguments does not help us to identify the thematic roles of the arguments, the order of arguments is probably the only option to determine the proper roles: the one further away from the verb is always the patient and the theme is next to the verb.

The OV-VO parameter resetting in today's language (see the Introduction) raises the question of what the order of the two [+animate] DPs is when the verb precends the arguments. Testing these sentences with native speakers yielded an interesting result: the verb cannot precede the two [+animate] DPs, not even in the case of Russian-dominant native speakers. Thus the following orders of the constituents are out:[68]

(14) a. *Sasha   zhugy-t-iz.   Masha-jez[patient] Ivan-ez[theme]*

      Саша   жугы-т-йз   Маша-ез   Иван-эз

      Sasha.NOM hit-CAUS-PST.3SG Masha-ACC   Ivan-ACC

      'Sasha made Masha hit Ivan.'

    b. *Sasha   zhugy-t-iz.   Ivan-ez[theme] Masha-jez[patient]*

      Саша   жугы-т-йз   Иван-эз   Маша-ез

      Sasha.NOM hit-CAUS-PST.3SG Ivan-ACC   Masha-ACC

      'Sasha made Masha hit Ivan.'

Contrary to the observation made by Kozmács (1994), I assume that changing the order of arguments with different animacy is only possible when the arguments have different discourse functions. The basic order among the arguments is always patient before theme and never theme before patient.

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[68] The native speakers said that even if they understood the sentence they would ask the question 'who hit whom?'. This means that the pragmatic status of the arguments would not be clear enough.

3.3.3 *Neutralization of the case-marked/non-case-marked object alternation*

The third syntactic property which occurs only with causatives of transitive verbs is the neutralization of the case-marking alternation on the object that has the causee function in the construction (Kozmács 1994).

As already mentioned in the Introduction (section 1.3.3), non-specific objects are morphologically unmarked in Udmurt (15a), while specific ones are marked with the Accusative morpheme *-ez/jez* (15b):

(15) a. *Sasha   kńiga   lydzh-iz.*
     Саша   книга   лыдӟ-из
     Sasha.NOM book-NOM read-PST.3SG
     'Sasha read a book.'

   b. *Sasha   kńiga-jez   lydzh-iz.*
     Саша   книга-ез   лыдӟы-т-йз
     Sasha.NOM book-ACC   read-PST.3SG
     'Sasha read the book.'

However, this characteristic of the Udmurt language seems to disappear in factitive causative constructions. The external argument of the base predicate is always case-marked, even if it is non-specific, regardless of whether the embedded verb is intransitive (16a-b) or transitive (17a-b).

(16) a. *Sasha   pinal-ez   uzha-t-iz.*
     Саша   пинал-эз   ужа-т-йз.
     Sasha.NOM   child-ACC work-CAUS-PST.3SG
     'Sasha made a/the kid work.'

   b. **Sasha   pinal   uzha-t-iz.*
     *Саша   пинал   ужа-т-йз.
     Sasha.NOM   child-(ACC)work-CAUS-PST.3SG
     'Sasha made a kid work.'

(17) a. *Sasha   pi-jez   kńiga-jez   lydzhy-t-iz.*

Саша   пи-ез   книга-ез   лыдӟы-т-йз.

Sasha.NOM   boy-ACC   book-ACC   read-CAUS-PST.3SG

'Sasha made a/the boy read the book.'

b. **Sasha   pi   kńiga-jez   lydzhy-t-iz.*

*Саша   пи   книга-ез   лыдӟы-т-йз.

Sasha.NOM   boy-(ACC)   book-ACC   read-CAUS-PST.3SG

'Sasha made a boy read the book.'

The unmarked vs. marked alternation still holds for the internal argument of the base predicate – if there is one – and the presence or absence of object marking is determined by the specificity of the embedded object (18a-b):

(18) a. *Sasha   pi-jez   kńiga   lydzhy-t-iz.*

Саша   пи-ез   книга   лыдӟы-т-йз

Sasha.NOM   boy-ACC   book.(ACC)   read-CAUS-PST.3SG

'Sasha made the/a boy read a book.'

b. *Sasha   pi-jez   kńiga-jez   lydzhy-t-iz.*

Саша   пи-ез   книга-ез   лыдӟы-т-йз

Sasha.NOM   boy-ACC   book-ACC   read-CAUS-PST.3SG

'Sasha made the/a boy read the book.'

The syntactic property presented above strongly suggests that the assumption about *-ez/jez* as an Accusative marker in the case of factitives needs to be revised.

3.3.4   *Case-marking patterns*

Crucially, ACC is not the only case with which the causee can be encoded in the argument structure of transitive base causatives. The causee of factitives displays an ACCUSATIVE – OBLIQUE case-alternation, where OBL is the *-en* instrumental morpheme (Tánczos 2013a). Consider the following pairs of sentences in (19) and (20).

(19) a. *Sasha   Masha-jez   pinal-ez   babyty-t-iz.*

      Саша   Маша-ез   пинал-эз   бабыты-т-йз

      Sasha.NOM Masha-ACC   baby-ACC   rock.to.sleep-CAUS-PST.3SG

      'Sasha had Masha rock the baby to sleep.'

    b. **Sasha   Masha-en   pinal-ez   babyty-t-iz.*

      *Саша   Маша-ен   пинал-эз   бабыты-т-йз

      Sasha.NOM Masha-INST   baby-ACC   rock.to.sleep-CAUS-PST.3SG

      'Sasha had Masha rock the baby to sleep.'

(20) a. *Sasha   kyrzhan-en   pinal-ez   babyty-t-iz.*

      Саша   кырӟан-эн   пинал-эз   бабыты-т-йз

      Sasha.NOM song-INST   baby-ACC   rock.to.sleep-CAUS-PST.3SG

      'Sasha made the baby rock to sleep with a song.'

    b. **Sasha   kyrzhan-ez   pinal-ez   babyty-t-iz.*

      *Саша   кырӟан-эз   пинал-эз   бабыты-т-йз

      Sasha.NOM song-ACC   baby-ACC   rock.to.sleep-CAUS-PST.3SG

      'Sasha made the baby rock to sleep with a song.'

Before going futher into the issue of case-alternation in factitives, it should be investigated whether the causative in example (20a) is a real factitive. The question arises since in the definition of factitives the causer has an effect on the causee, which is not possible if the causee is non-agentive. The interpretation of example (20a) suggests that in the syntactic representation of the sentence *kyrzhan* 'song' is not in the causee position but it is an adjunct and *Sasha* is not the causer but an agent that directly affects *pinal* 'baby'. If the latter interpretation is the correct one, the sentence 'The song rocks the baby to sleep' should have the same syntactic structure as the example (20a), which is not the case. Consider the following sentence in (21):

(21) *Kyrzhan   pinal-ez   babyt-iz.*

    кырӟан   пинал-эз   бабыт-йз

    song.NOM baby-ACC rock.to.sleep-PST.3SG

    'The song rocks to sleep the baby.'

The verb in example (21) has a different form since it lacks the factitive *-t-* morpheme. Of course, in this sentence *kyrzhan* 'song' can appear as an adjunct.

(22) *Sasha   kyrzhan-en   pinal-ez   babyt-iz.*

     Саша   кырӟан-эн   пинал-эз   бабыты-т-йз

     Sasha.NOM song-INST   baby-ACC rock.to.sleep-PST.3SG

     'Sasha made the baby rock to sleep with a song.'

This provides evidence for the sentence in (20a) to be a real factitive.

Case-alternation is certainly not unique to Udmurt but is cross-linguistically attested, and it can be found, for instance, in Hungarian, as well (cf. Komlósy 2000, Nemesi 2003, Bartos 2011, 2013).

(23) a. *Köhög-tet-tem   a   gyereke-t.*

       cough-CAUS-PST.1SG   the   child-ACC

       'I made the child cough.'

      b. *Köhög-tet-tem   a   gyerek-kel.*

       cough-CAUS-PST.1SG   the   child-INST

       'I had/made the child cough.'

                                         (Bartos 2011)

Bartos (2011), among others, argues that in the case alternation presented above, the two sentences have different interpretations because in example (23a) the causer, I (*pro*) has a direct effect on the causee, the child, while in example (23b) the causer does not have a direct effect, and the sentence sounds more like an indirect causation.[69]

As shown by the examples above, the case-alternation correlates with the degree of control retained by the causee argument (Comrie 1981). In other words, the case alternation depends on whether the causer has a real control on the causing event and the causee or not.

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[69]   In his approach to case alternation in Hungarian intransitive based causatives, Nemesi (2003) argues that the choice of the case appearing on the causee depends on the original thematic role of the argument. If the argument of the base predicate is non-agentive, then it bears Accusative case, because Accusative is available only for non-agentive arguments. If the argument of the base predicate is agentive, then it bears either Accusative or Instrumental case. The choice in this case depends on whether the causer is more agentive or more like an instructor.

Languages differ in how they express this indirect-direct causation with case-alternation. For instance, in Japanese (24) and Hungarian (see example (23) above) the case alternation occurs only with intransitive based causation.

(24) a. *Taroo ga   Ziroo o   ik-ase-ta.*
      Taroo TOP Ziroo ACC   go-CAUS-PST
      'Taroo made Ziroo go.'

<div align="right">(Comrie 1981:25)</div>

   b. *Taroo   ga   Ziroo ni   ik-ase-ta.*
      Taroo   TOP   Ziroo DAT   go-CAUS-PST
      'Taroo had Ziroo go.'

<div align="right">(Comrie 1981:26)</div>

Nevertheless, there are languages where the case alternation appears with transitive based causation, just like in Udmurt. The Dravidian language Kannada is a case in point. In this language a DAT-INST case-alternation has been observed (Comrie 1981), where the causee argument is encoded with DAT in indirect causation and with INST in direct causation.

(25) a. *Avanu   nanage   bisketannu   tinnisidanu.*
      3SG   1SG-DAT   biscuit-ACC   eat-CAUS-PST
      'She fed me with biscuit.'

<div align="right">(Comrie 1981:27)</div>

   b. *Avanu   nanninda bisketannu   tinnisidanu.*
      3SG   1SG-INST   biscuit-ACC   eat-CAUS-PST
      'She had me eat biscuit.'

<div align="right">(Comrie 1981:28)</div>

The other language mentioned in the literature in the context of case-alternation with transitive based causation is Bolivian Quechua (Comrie 1981, Saksena 1980). This language shows the same type of alternation that can be observed in Udmurt. Consider the following examples from Saksena (1980):

(26)   a.   *Nuqa Fan-ta   rumi-ta   apa-či-ni.*

         1sg   Juan-ACC   rock-ACC   carry-CAUS-1SG

         'I made Juan carry the rock.'

    b.   *Nuqa   Fan-wan   rumi-ta   apa-či-ni.*

         1sg   Juan-INST   rock-ACC   carry-CAUS-1SG

         'I had Juan carry the rock.'

In example (26a) the causer has a direct effect on the causee so the causee bears Accusative case. This contrasts with example (26b), where the causer has only an indirect control – more like a request – on the causee, so it is encoded with Instrumental case. This is exactly what we have seen in Udmurt (see example (18) above).[70]

Comrie's (1981) proposal of degree of control is similar to the analyses put forth by Alsina (1992) and Ackerman & Moore (1999), who argue that case alternation in factitives depends on the argument of the embedded predicate of causatives. It means that the different encodings of the causee correlate with the manipulation effect of the causer. This is stated in the *Affectedness Hypothesis* (27).

(27)   *Affectedness Hypothesis*: when a causee argument exhibits a semantic alternation, then an alternant with a more affected interpretation will be realized as a grammatical relation that is higher on the Relational Hierarchy (DO>IO>OBL) than the relational encoding of the non-affected alternant; the more affected argument of the base predicate is encoded by ACC and the less affected one by INST.

                                                      (Ackerman & Moore 1999:19)

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[70]   It is important to note here that there are languages where the difference between indirect-direct causation is expressed with two different morphemes. Hiaki (a Native American language of the Uto-Aztecan family) is a good example for this phenomenon. In Haiki the direct causative is expressed with the suffix *-tua* attached to the verb (i), while indirect causation is expressed with the suffix *-tevo* (ii) (Tubino Blanco 2011).

(i) *Maria hitevi-ta   uusi-ta   hitto-tua-k*
   Maria doctor-ACC   child-ACC   treat-CAUSE-PERF
   'Maria made the doctor treat the child.'

(ii) *Maria uusi-ta   hitto-tevo-k*
   Maria child-ACC treat-CAUSE(I)-PERF
   'Maria had the child treated.'

                                                      (Tubino Blanco 2011:2-3a)

In the Udmurt examples (19a) and (20a) the causee is manipulated and affected by the causer and the argument is encoded with ACC case. In the sentences in (19b) and (20b), on the other hand, the causer cannot manipulate the causee, rather the causer lets the causee do something, as we can see from the English translations. According to the *Affectedness Hypothesis,* the causee must be encoded with OBL case. The causee encoded with ACC is more in the domain of the causative predicate than the causee encoded with OBL (Alsina 1992, Ackermann and Moore 1999). As has already been mentioned, these grammatical alternations are cross-linguistically well-known from the literature and they are mostly based on transitivity (Ackermann and Moore 1999) (28).

(28) *Transitivity Hypothesis:*

    a) intransitive base predicate → direct object causee

    b) transitive base predicate → indirect object or oblique object

Udmurt does not seem to entirely conform to the *Transitivity Hypothesis*, because the alternation is based on the transitive predicate, just like in (28b), but the alternation is not between an indirect object and an oblique object, but between a direct object and an oblique object.

Nevertheless, affectedness as a source of case alternation is not limited to causatives cross-linguistically, as proposed by Næss (2004, 2007) in his new model for Differential Object Marking. The crucial property that triggers overt marking for direct objects in his model is affectedness. According to Næss (2004) objects that are positively specified for affectedness take Accusative case, while objects that are non-affected take no marking.

Næss' (2004) approach to the role of affectedness in Different Object Marking and the phenomenon that Accusative case appears in Udmurt only on affected causees lead us back to the question of the suffix *-ez/jez* presented in the Introduction Chapter.

3.4   Approach to the suffix *-ez/jez* on the causee

In the previous sub-sections I followed the traditional account and considered the suffix on the causee argument to be Accusative case in all cases.

In this sub-section I propose an alternative account of the suffix that appears on the causee argument in transitive based causatives. The analysis is based on the assumption that in

Udmurt neither ditransitive nor causative predicates are able to assign two Accusative cases in the same clause.

3.4.1 *Nominalization – is the suffix -ez/jez of the causee an inherent case marker?*

In nominalizations of verbal constructions, the syntactic properties of the verbal predicate (i.e. the argument structure) are unchanged, only the grammatical encoding of the arguments changes due to the effect of the nominalizing affix (see e.g. Szabolcsi & Laczkó 1992). This phenomenon is similar to the difference between active and passive voice in a sentence. For instance, in the case of the Hungarian verb *megteremt* 'he/she creates' and derived noun phrase *megteremtés* 'creating', the same argument structure is projected in the syntax:[71]

(29) a. *megteremt* 'he/she creates': <agent.NOM> <patient.ACC>

  b. *megteremtés* 'creating': <agent.ADV> <patient.POSS>

As shown in (29), both the verb and the noun have an agent and a patient in their argument structure. In (29a) the agent appears as the subject and it has a nominative case and the patient as the object is marked with Accusative. However, in (29b) the arguments have different case markings. The agent bears an oblique case and it has a different grammatical role (it is optional in the sentence), while the patient gets POSS case.

 In the case of transitive verbs, the presence of the external argument of the predicate is not obligatory, while the patient obligatorily appears. If this is true, then the 'professor' argument in the following constructions cannot be the agent, only the patient. This means that we can talk about the examination of the professor and not the examination by the professor in (30a), yet both interpretations are possible in (30b). The difference between (30a) and (30b) is in the nature of the event: in (30a) the derived NP is a complex event nominal, while the NP in (30b) is a single or simple event nominal (Szabolcsi & Laczkó 1992).

(30) a. *a professzor   vizsgáztatása*

    professor.NOM   testing.PX.3SG

    'testing of the professor'

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[71] It is important to note that this property of derived NPs holds only for NPs denoting a complex event (Laczkó 1995).

b. *a   professzor   vizsgája*

   the   professor.NOM   examination.PX.3SG

   'examination of the professor'

As already mentioned, in the argument structure of derived NPs, the patient argument is encoded with POSS case and it is interpreted as the possessor of the event, and a non-patient argument cannot appear in the construction (31a). Non-patient arguments occur only with non-derived, simplex eventive NPs (31b).

(31) a. **ez   a   hét   levizsgáztatása   volt*

       this   the   week   PRT.testing.3SG   be.PST

       'this was the testing of the week'

   b. *ez   hét   vizsgája   volt*

       this   week examination.3SG   be.PST

       'this was the exam of the week'

Another difference between the behavior of derived and non-derived NPs is that derived NPs do not have plural forms (32a), while non-derived NPs do (32b):

(32) a. **a   diákoknak   a   professzor   általi levizsgáztatásai*

       the   student.PL.DAT   the   professor.NOM by   PRT.testing.PL

       'the testing of the students by the professor'

   b. *a   diákoknak   a   professzor   általi vizsgái*

       the   student.PL.DAT   the   professor.NOM by   testing.PL

       'the examinations of the students by the professor'

Turning back to Udmurt, the process of nominalization in Udmurt was introduced in the previous chapter (section 2.4.4.2). It was shown that there are two suffixes, *-on/n* and *-em/m,* that function as nominalizers.

The nominalization of factitives is syntactically similar to the nominalization of causative verbs. The external argument (the causer) has disappeared from the structure and the external argument of the base predication (the causee) is in NOM case. This is illustrated in the following pair of sentences (33a-b):

(33) a. *Masha   Sashajez   kyrzhatiz.*

Маша   Сашаез   кырӟатӥз.

Masha.NOM   Sasha.ACC sing.CAUS.PST.3SG

'Masha made Sasha sing.'

b. [*Sasha   kyrjaton*]   *van'zesty*   shugjas'kytiz.

Саша   кырӟатон   ваньзэсты   шугъяськытӥз

Sasha.NOM singing   everyone.ACC embarrass.PST.3SG

'Making Sasha sing embarrassed everyone.'

The encoding of the original causee argument with NOM due to nominalization strongly suggests that in factitives *-ez/jez* functions as a structural case marker.

3.4.2. *-ez/jez* as an associative suffix in factitives

As argued by Siewierska & Bakker (2008), the case marking of core arguments has the function – among other functions – of indexing properties of the referents of the arguments. Differntial Object Marking is a good example for this function of case marking, since the marking of the direct object in a transitive sentence is determined not only by the grammatical relations but also by semantics and pragmatic properties such as definiteness, specificity or animacy.

   This indexing function is similar to the associative function of the suffix *-ez/jez* in Udmurt presented in subsection 1.3.3.2 of the Introduction Chapter. As argued in that chapter, in the associative use the suffix *-ez/jez* encodes a relation between two entities in the sentence, and the entities are indentifiable because of their pragmatic association with the other indentifiable entity.

   This associative relation is presented here again with the existential sentences from Edygarova (2015):

(34) a. *kar-iṉ zoopark(-ez) vań.*

city-INE zoo(-3SG) EX.PRS

'There is a zoo in the city.'

b. *kar-iꞑ kaliḵ(-ez) tros.*

city-INE people(-3SG) many

'There are many people in the city.'

(Edygarova 2015:15-16)

It was also presented in subsection 1.3.3.3.3. of the Introduction Chapter that in Udmurt, which is a Differential Object Marking language, all the ACC marked objects have the semantic feature [+] human and [+] specific.

Keeping these two facts about the suffix *-ez/jez* in mind, I assume the following approach to the double appearance of *-ez/jez* in transitive based factitive constructions. The theme argument of the construction bears ACC case and the appearance of the suffix is based on the rules of the Differential Object Marking system in Udmurt. However, the occurrence of the suffix *-ez/jez* on the causee argument is controlled by the two factors presented above, namely, the rules of Differentaial Object Marking in Udmurt and the associative funtions of the suffix. The causee argument is assumed to always be [+human] and [+specific]. This could be enough reason to consider *-ez/jez* to be an ACC marker, but it is still a problem that deriving two ACC cases in Udmurt seems to be complicated, as argued in section 3.3.1.[72,73]

Instead of being a core ACC case, I assume that the appearce of *-ez/jez* on the causee argument shows an intermediate stage between the associative use and the core Accusative use of the suffix. The function of the suffix is to establish a pragmatic relation between the causer and the causee, both of which are identifiable, and the obligatory appearance can be derived from the semantic features of the argument.

Thus far this can be a conclusion, but the question needs deeper investigations in the future.

3.5   Pylkkänen's (2002, 2008) diagnostics for Phase-selecting causatives

In section 2.4.3 a unified syntactic approach was proposed to lexical causative transitive verbs like *sajkatyny* 'to wake up'. In this proposal causative verbs contain a CauseP and a VoiceP in

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[72] In addition, it was also argued in section 3.3.4 that in Udmurt there are causee arguments with a [–human] feature, although they bear INST case instead of ACC case.

[73] As Huba Bartos (p.c.) pointed out to me, it could be difficult to elicit factitives where the causee is not specific, but this option could not be excluded theroetically.

their internal structure. The CauseP introduces the causing event and the VoiceP introduces the external argument into the structure. This is illustrated in (35):

(35) a. *Anaj*   *sajkatiz*   *pinaljosty*

     Анай   сайкатйз   пиналъёсты

     mother.NOM   wake.up.PST.3SG   child.PL.ACC

     'The mother woke up the children.'

     b.

```
                    VoiceP
                   /      \
                Anaj     Voice'
                        /      \
                   CauseP     Voice⁰
                   /     \
              Cause'
              /     \
           vP      Cause⁰
          /  \       -t-
        v'
       /  \
     √P    v⁰
    /  \
   √'
  /  \
pinaljosty   √sajka-
```
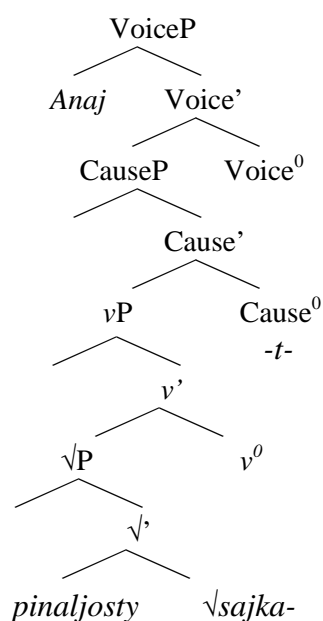
In the case of external causation the same syntactic representation is assumed, but there is an extra Causer layer merged on top of the structure for the factitive causing event. The Cause head contains the causative morpheme *-t-*. The external argument of the factitive event, similarly to the external argument of inner causatives, is introduced in another Voice projection in the sense of Kratzer (1994).

The structure of the factitive causative formed from a transitive predicate is illustrated in (36):

(36) a. *Sasha*   *Masha-jez*   *pinal-ez*   *babyty-t-iz.*

     Саша   Маша-ез   пинал-эз   бабыты-т-йз

     Sasha.NOM   Masha-ACC   baby-ACC   rock.to.sleep-CAUS-PST.3SG

     'Sasha had Masha rock the baby to sleep.'

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b.

VoiceP
Sasha   Voice'
CauseP   Voice^0
Cause'
VoiceP   Cause^0
-t-
Mashajez   Voice'
CauseP   Voice^0
Cause'
vP   Cause^0
-t-
v'
√P v^0
√'
pinal-ez   √baby-
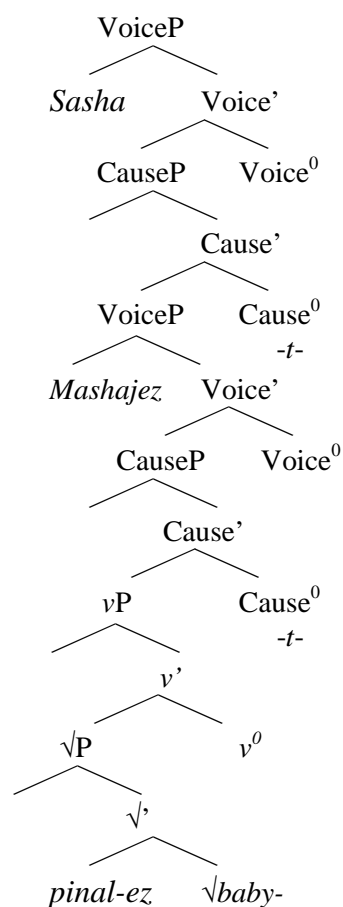
There is a difference between the two VoiceP layers in the structure. As shown in the previous section, the Voice that belongs to the internal structure of causative verbs can have [±agentive] feature values since the causer can be an agent or it can be non-agentive. The Voice layer appearing on the top of the factitive structure, on the other hand, can only have a [+agentive] feature.

(37) *Kyrzan   Masha-jez   pinal-ez   babyty-t-iz.

     *Кырӟан   Маша-ез   пинал-эз   бабыты-т-йз

     Song.NOM   Masha-ACC   baby-ACC   rock.to.sleep-CAUS-PST.3SG

     'A song had Masha rock the baby sleep.'

As mentioned in section 1.4.2 in the Introduction Chapter, CauseP can be either root-selecting, VP-selecting or Phase-selecting. The former two options seem to appear with

lexical causatives, while factitives are typically Phase-selecting causatives, as illustrated in (38):

(38)
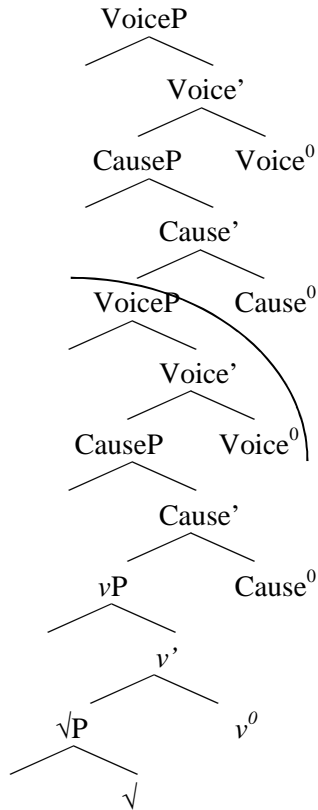
Pylkkänen (2008) diagnoses this property of the Cause head with the following tests: i) VP modification of the caused event is possible, ii) verbal morphology is possible between the root and the Cause, iii) Agent oriented modification of the caused event is possible and iv) Causatives based on unergatives and transitives are possible.

In what follows, these syntactic diagnostics are applied to Udmurt:

I. VP modification of the caused event is possible

A Phase-selecting Cause can be modified on two levels, as illustrated in the following sentence from English (39):

(39) *I made John cry in his room.*

This example is ambiguous, it has two interpretations depending on the level the modifier is attached to:

(40) *John and I were in the same room and I made him cry.*

(41) *I made John cry and he did it in his room.*

Contrary to English, the VP modifier in Udmurt can only modify the causative event and not the basic event if the basic predicate is transitive (42):

(42) *Mon   börzhyti   Sashajez   solen   komnatajaz.*
      Мон   бӧрӟыты́   Сашаез   солэн   комнатаяз.
      1SG   cry.CAUS.PST.1SG   Sasha.ACC   3SG.GEN room.INESS.3SG
      'I made Sasha cry in his room.'

The sentence in (42) only has the meaning 'Sasha and I were in his room and I made him cry'. The situation is different if the base predicate is transitive, because in the sentence in example (43) has the meaning 'I made Sasha write a letter and he did this in his room'. The ambiguous interpretation is possible only if *room* stands without the possessive.

(43) *Mon Sashajez   solen   komtanajaz   gozhtet   goztyti.*
      Мон Сашаез   солэн   комнатаяз   гожтэт   гожтыты́.
      1SG Sasha.ACC 3SG.GEN room.INESS.3SG   letter.(ACC)   write.CAUS.PST.3SG
      'I made Sasha write a letter in his room.'

II. Verbal morphology between the root and the Cause

Pylkkänen (2002, 2008) argues that in the case of Phase-selecting causatives, other morphological elements can appear between the root and the Cause:

(44) *John made him be called back.*

In Udmurt it is not possible to attach any kinds of affixes between the verbal root and the causative morpheme:

(45) a. *lydzy-ty-ny*

        лыдӟы-ты-ны

        read-CAUS-INF

    b. **lydz-emyn-ty-ny*

        лыдӟ-эмын-ты-ны

        cry-PASS-CAUS-INF

    c. **lydzy-lla-ty-ny*

        лыдӟы-лля-ты-ны

        cry-FREQ-CAUS-INF

III. Agent oriented modification of the caused event

In English an agent oriented modifier can be attached either to the lower or to the higher VoiceP (46):

(46) a. *I made him run quickly.*

    b. *I quickly made him run.*

    The same modification appears in Udmurt, but contrary to English, which is a language with periphrastic causatives, the position of the modifier is not relevant:

(47) *Mon   Sashajez   zol   kuarajen   kyrzaty.*

      Мон   Сашаез   зол   куараен   кырӟатй.

      1SG   Sasha.ACC loud voice.INST sing.CAUS.PST.1SG

      'I made Sasha sing loudly.' or 'I loudly made Sasha sing.'

The example sentence in (47) is ambiguous between the two readings. The modifier *zol kvarajen* 'loudly' can modify either the basic event or the causing event.

    It is important to note, however, that not all agent oriented modifiers have this property. For instance, the agent oriented modifier *juri* 'willingly' can only be attached to the higher Voice (48):

(48) *Juri*   *pijez*   *kyrzhaty*

    Юри   пиез   кырӟаты.

    willingly   boy.ACC sing.CAUS.PST.1SG

    'I willingly made the boy sing.'

IV. Factitive unergatives and transitives are possible

As shown among the syntactic properties of factitives in section 3.2.2, the causative morpheme -*t*- can be merged both with unergatives (49a) and with transitives (49b):

(49) a. *Masha*   *Sasha-jez*   *uzha-t-iz.*

       Маша   Саша-ез   ужа-т-йз.

       Masha.NOM   Sasha-ACC work-CAUS-PST.3SG

       'Masha made Sasha work.'

    b. *Masha*   *Sasha-jez* *kńiga-jez*   *lydzhy-t-iz.*

       Маша   Саша-ез   книга-ез   лыдӟы-т-йз

       Masha.NOM   Sasha-ACC book-ACC   read-CAUS-PST.3SG

       'Masha made Sasha read the book.'

To sum up: All of Pylkkänen's (2002, 2008) tests that have been applied to the Udmurt data show that factitives in Udmurt are Phase-selecting causatives.

3.6   Events and domains

Periphrastic and lexical causations clearly differ from productive causations if we have a look at the domains and the events which they contain. Lexical causatives are typically bi-eventive and monoclausal, while syntactic causatives are bi-eventive and bi-clausal. Bi-clausality is clear in the latter case, since the construction contains two different predicates, one for the causing event and one for the base event.[74] However, it is not trivial to answer the question of how many clauses and events productive causatives have. The typological classification of morphologically marked causatives is based on whether they are mono- or biclausal, and not on how many events they involve, because all kinds of causatives are bi-eventive.

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[74]   The syntactic properties of periphrastic causatives are shown in Chapter 4.

In what follows, different types of tests by Horvath & Siloni (2010) and Bartos (2011) are presented and used for analyzing the clausality and the eventivity of external causative structures.

3.6.1 *Tests for mono- versus biclausality*

Horvath and Siloni (2010) use several diagnostics to show the difference between biclausal and monoclausal morphologically marked causatives. Japanese, for instance, has biclausal morphologically marked causatives, while Hungarian seems to have monoclausal productive causatives.

In the next section, I show two of their tests, negation and condition B effects, and I apply their tests to Udmurt, which seems to be closer to Hungarian than to Japanese.

3.6.1.1 Negation

Negation is one of the diagnostics which can show exactly how many clauses a causative construction involves. If the basic event and the causation can be negated separately, we can talk about bi-clausality (Horvath and Siloni 2010, Bartos 2011).

In Japanese, the negation test clearly shows that there are two clausal domains in causatives, as shown in the following examples (50a-b):

(50) a. *Toru-wa   Yoko-o   ik-ase-nakat-ta*
        Toru-TOP   Yoko-ACC   go-CAUS-NEG-PST.3SG
        'Toru did not make Yoko go.'

      b. *Toru-wa   Yoko-o   ik-anaku-sase-ta*
        Toru-TOP   Yoko-ACC   go-NEG-CAUS-PST.3SG
        'Toru made Yoko not go.'

(Horvath and Siloni 2010)

The order of the morphemes determines which event of the complex predicate is in the scope of negation. In (50a) the order of the affixes (CAUS-NEG) gives the meaning that the causation event is in the scope of negation. But if we change the order, as in (50b), then causation is not in the scope of negation, and as we can see from the English translation, it is the base event, but not the causing event that is negated.

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This is not the case in Hungarian. Unlike in Japanese, where negation is affixal, negation is formed analytically in Hungarian with the *nem* particle (51a) in causative constructions as well.

(51) a. *Nem énekel   a   gyerek.*
        not   sing.PRS.3SG   the   child.NOM
        'The child does not sing.'

      b. *Nem énekel-tet-t-em   a   gyerekek-et.*
        not   sing-CAUS-PST-1SG   the   child.PL-ACC
        'I didn't make the children sing.' NOT: I made the children not sing.'

<div align="right">(Horvath and Siloni 2010)</div>

As shown by the translation, the only available interpretation of the sentence is such that the cause event is in the domain of negation. It is not possible to negate the base event separately. As mentioned by Bartos (2011), this difference may result from the different nature of negation in the languages and not from the nature of causation.

3.6.1.2 Condition B

Even though the negation test cannot show exactly the clausal difference between Japanese and Hungarian, because of the difference in the type of negation, Condition B can. In monoclausal causation, a personal pronominal argument of the base verb cannot be bound by the causer (Bartos 2011), and this is exactly the case in Hungarian causatives (52a-b).

(52) a. *Laci$_x$ ír-t   néhány sor-t   magáról$_x$/*ról-a$_x$*
        Laci   write-PST-3PL   a.few line-ACC   himself-about/about-3SG
        'Laci wrote a few lines about himself.'

      b. *Laci$_x$ ír-at-ott   a fiúk-kal   néhány sor-t   magáról$_x$/*ról-a$_x$*
        Laci   write-CAUS-PST   the boys-INST   a.few line-ACC   himself-about/about-3SG
        'Laci had the boys write a few lines about him.'

<div align="right">(Bartos 2011)</div>

As the examples in (52) show, the subject of the sentence, *Laci,* cannot bind the pronoun *róla* either with a simple predicate (52a) or with a complex predicate (52b), which means that the pronoun and the antecedent are in the same clause domain.

In Japanese, the binding domains are different with non-derived and derived predicates (53).

(53) a. *Torui-wa   Kitaharaj-ni   kare*$_i$/*$_j$-o syookai   si-ta*.
       Toru-TOP   Kitahara-DAT he-ACC   introduction do-PST

       'Toru introduced him to Kitahara.'

   b. *Toru$_i$-wa   Kitahara$_j$-ni   kare$_i$/*$_j$-o syookai   s-ase-ta*.
       Toru-TOP   Kitahara-DAT he-ACC   introduction do-CAUS-PST

       'Toru made Kitahara introduce him'.

(Horvath and Siloni 2010)

In (53a) *kare* cannot be coreferential with either *Toru* (the external argument) or *Kitahara* (the internal argument), because they are in the same clause, but in (53b) *kare* can be bound by the subject/topic *Toru*, which empirically shows that the pronoun and the topic DP must be in distinct clauses. The explanation for this is that the base event and the causing event are distinct, too (Shibatani 1990, Bartos 2011).

Based on these two diagnostics, negation and Condition B, I can conclude that in Hungarian the productive causation is monoclausal, while in Japanese it is bi-clausal.

3.6.2   *Monoclausal Udmurt Causatives*

In this section I show how the Udmurt data can be analyzed based on the diagnostics presented above. First let us have a look at negation.

Negation in Udmurt is not affixal, as in Japanese, but analytical, as in Hungarian. However, while Hungarian has a negative particle, Udmurt has an inflected negative verb.

I submit that causatives in Udmurt are monoclausal, as negation cannot scope over the embedded verb of the construction (54):

(54) *Mon*   *pinaljos-ti*   *öj*   *kyrzha-t-i.*

Мон   пиналъёс-ты   öй   кырӟа-т-ы.

1SG   (the) kids-ACC   not-PST.1SG   sing-CAUS.SG

'I didn't make the kids sing.'   NOT: 'I made the kids not sing.'

Although negation is expressed by the negative verb in almost all tenses, there is one tense in Udmurt, the Perfect, where negation is affixal, as in Japanese (55).

(55) a. *uzhas'k-em*   b) *uzhas'ki-mte-je*

ужась-кем   ужаськы-мтэ-е

work-PERF.1SG   work-PERF-NEG-1SG

'I had worked'   'I had not worked'

Similarly to the Japanese forms, this verb form can properly show the scope of negation in an Udmurt causative form.

(56) a) *Sasha*   *pinaljos-ti*   *kyrzha-ty-mte.*

Саша   пиналъёс-ты   кырӟа-ты-мтэ.

Sasha-NOM   kids-ACC   sing-CAUS-NEG.3SG

'Sasha had not made the kids sing.' NOT: 'Sasha had made the kids not sing.'

As expected, there is no difference between the affixal and the analytic constructions. In both cases the whole predicate is in the domain of negation. To change the order of the suffixes is not an option in Udmurt (*kyrzha-mte-ty *sing-NEG.3SG-CAUS) thus it is not possible to have only the causing event in the scope of negation.

The second test works in exactly the same way as in Hungarian. The personal pronoun argument of the internal predicate cannot be bound by the causer:

(57) *Dyshetis'$_x$*   *pinaljos-ti*   *gozhtet*   *gozhty -t-iz*   **so-lesh$_x$/as-lesh$_x$.*

Дышетйсь   пиналъёс-ты   гожтэт   гожты-т-йз   со-лэсь/ас-лэсь.

teacher.NOM   (the)kids-ACC   letter.NOM   write-CAUS-PST   him-ABL/of-himself

'The teacher had the kids write a few lines about him.'

Based on these tests, it can be concluded that productive causatives in Udmurt behave exactly like causatives in Hungarian, i.e. they are monoclausal.

3.6.3   *Tests for mono- versus bi-eventivity*

The second issue which is always in the focus of the examination of causatives cross-linguistically is whether they are mono- or bi-eventive. Below I discuss two of the diagnostics used by Bartos (2011) for testing this property of Hungarian causatives.

3.6.3.1   Subjects of participials

If the causation involves two subject roles, it means that the clause involves two different events (Bartos 2011), as we can see in Hungarian (58a) and in Japanese (58b):

(58) a. *Laci a   földön   fek-ve   énekel-tet-t-e   Mari-t.*
      Laci the   ground-on lie-PTC   sing-CAUS-PST-3SG.DEF   Mari-ACC
      'Laci made Mary sing lying on the ground.'
      (ambiguous: Laci or Mary was lying on the ground)

                                  (Bartos 2011)

    b. *Taroo-wa   arui-te   Hanako-o   ik-ase-ta.*
      Taro-TOP   walk-PTC   Hanako-ACC   go-CAUS-PAST
      'Taro made Hanako go, walking.' or 'Taro, walking, made Hanako go.'

                            (Horvath and Siloni 2010)

Since both in Hungarian and in Japanese either the causer or the causee can be controllers, the sentence has two different readings, which means that there are two different events with two different potential subjects.

3.6.3.2   Low adverbial modifiers

Just like in the case of negation, low adverbials can help us analyze the eventivity of a productive causative, because if the basic event and the causing event can be modified separately, we can talk about a bi-eventive causation (Bartos 2011).

(59) a. *A tanár   kétszer   írat-t-a   le   Laci-val   a vers-et.*

  the teacher two-times write-CAUS-PST-3SG.DEF down Laci-INST the poem-ACC

  'The teacher made Laci write down the poem twice.'

  (ambiguous: 'twice made/caused' or 'twice wrote')

  b. *Jon-wa muriyari   sono ko-ni   sono kutusita-o*

  Jon-TOP forcibly that   child-DAT   that   sock-ACC

  ooyorokobi-de   hak-ase-ta.

  happily   put.on-CAUS-PST

  'Jon forcibly made the child put on his socks(,) happily.'

  (ambiguous: Jon or the child was happy)

Based on the ambiguous reading of the low adverbial modifiers (59a-b) and the subject of participials, I can draw the final conclusion, namely: causatives are bi-eventive both in Hungarian and in Japanese.

3.6.4 *Udmurt causatives are also bi-eventive*

Using Bartos' (2011) diagnostics for testing bi-eventity in causative constructions, we find that Udmurt causatives also involve two events – the core event and the causing event. Both events can be modified by low adverbials like *kyk pol* 'twice' (60a), and with participial clauses they result in ambiguity: either the causer or the causee can be the subject of the participle, for instance *muzjem vylyn kyllysa* 'lying on the ground' (60b).

(60) a. *Dyshetis'   Sasha-jez   odig kirzhan-ez kyk pol   kirzha-t-iz.*

  Дышетӥсь   Сашаез   одӥг кырӟан-эз кык пол   кырӟа-т-йз.

  teacher.NOM Sasha-ACC   one   song-ACC   twice   sing-CAUS-PST

  'The teacher made Sasha sing a song twice.'

  (ambiguous: 'twice made/caused' or 'twice sang')

  b. *Sasha   muzjem   vylyn   kyl'l'ysa   kyrzha-t-iz   Masa-jez.*

  Саша   музъем   вылын   кылльыса кырӟа-т-йз   Маша-ез.

  Sasha.NOM ground   on   lying   sing-CAUS-PST   Masha-ACC

  'Sasha made Masha sing lying on the ground.'

As these examples show, productive causative constructions behave like causatives in Hungarian, i.e. they are monoclausal yet bi-eventive.

3.7   Summary

The empirical data of Udmurt factitive constructions suggest a syntactic analysis of these constructions rather than a lexicalist one. The double object argument structure, the strict word order among internal arguments with a [+animate] feature and the ACC case marking neutralization of the causee are properties that cannot belong to the lexicon. The ACC-INST alternation has semantic and pragmatic reasons, namely the affectedness of the causee by the causer.

This alternation in the grammatical encoding of the causee is a counterexample to Comrie's (1981) hierarchy which says that in the INST>DAT>ACC hierarchy the less effected argument is encoded with ACC case and the most affected one with INST. As we have seen, this is exactly the opposite in Udmurt, because the less affected argument in the construction is marked with INST case.

In the syntactic structure of factitives in Udmurt, similarly to lexical causative verbs, the causing event is assossiated with the CauseP, and the factitive causative morpheme *-t-* occurs in the head position of this projection. Since following Pylkkänen's (2002, 2008) analysis it is assumed that CauseP is responsible only for the causing event and it does not have a specifier position, I proposed that the external argument, the causer, is introduced in the specifier position of VoiceP, in the sense of Katzer (1996). As factitives are productive and the factitive CauseP is always attached to a VoiceP with its external argument, they are Phase-selecting causatives in the sense of Pylkkänen (2002, 2008).

CHAPTER 4

Periphrastic Causatives

4.1   Introduction

This chapter focuses on periphrastic or analytic causatives. Analytic causative constructions are formed with a separate lexical verb such as *make* 'to do' in English (1a) or *faire* 'to make' in French (1b).

(1)   a. *John made Sarah cry*.

      b. *Imogen fait   rire   Brian.*

         Imogen makes laugh   Brian

         'Imogen makes Brian laugh.'

According to Pylkkänen's (2002, 2008) *Selection parameter* periphrastic causatives are always Phase-selecting causatives, because the causative predicates or light verbs always select a VoiceP or a CP with an external argument (traditionally called a clause with a subject). Tubino Blanco (2011) argues that verbs like *make* require an embedded external argument but this embedded argument does not have to be an agent. Consider the following English examples:

(2)   a. *The earthquake* [*made the buildings collapse*].   unaccusative

      b. *That dress made* [*her be taken for her sister*].   passive

      c. *I made* [*her be happy/with you/the person she is today*] .   state

                                               (Tubino Blanco 2011:117)

In this chapter I will examine periphrastic causatives in Udmurt with two verbs which are used as causative or permissive verbs, *kosyny* 'to order' (3a) and *lez'yny* 'to let' (3b). The two constructions have similar but not identical interpretations:

(3)   a. *Masha   Sasha-jez kńiga-jez/ kńiga   lydzhyny   kosiz.*

Маша	Саша-ез	книга-ез/	книга	лыдӟыны	косӥз.
Masha.NOM	Sasha-ACC	book-ACC/	book-(ACC)	read.INF	order.PST.3SG

'Masha ordered Sasha read the/a book.'

b. *Masha*   *Sasha-jez*   *kńiga-jez/*   *kńiga*   *lydzhyny*   *lez'iz.*

Маша	Сашаез	книга-ез/	книга	лыдӟыны	лэзиз.
Masha.NOM	Sasha-ACC	book-ACC/	book-(ACC)	read.INF	let.PST.3SG

'Masha let Sasha read the/a book.'

Despite the fact that *kosyny* and *lez'yny* are typical permissive verbs in Udmurt, in this chapter they are treated as lexicalized causative verbs and they are compared with functional and lexical causative verbs like *fare* in Italian or *make* in English. This causative treatment is possible in the sense of Marantz (1984) and Baker (1988), who use the notion 'causative' for all grammatical function changing processes that cause a valency increase of the predicate.[75]

The examples in (3) show that – similarly to morphological causatives – Udmurt periphrastic causatives also result in a construction in which the causee is marked with ACC case and the direct object of the embedded predicate *lydzyny* 'to read' is either marked with ACC case or is unmarked.

This chapter is structured as follows: in section 4.2 the two causative verbs (*kosyny* and *lezhyny*) are introduced with their most important syntactic properties. Section 4.3 deals with the nonfinite complement of these causative verbs and proposes an ECM analysis of these constructions. In section 4.4 I propose that periphrastic causatives in Udmurt are Phase-selecting causatives in the sense of Pylkkänen (2002, 2008) if their complement is a finite embedded clause, but they are not Phase-selecting if the complement is nonfinite. The most important conclusions close this section (4.5).

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[75] For a similar treatment of the Hungarian permissives *hagy* 'let' and *enged* 'let' see Tóth (2000). However, in contrast to to her terminology, I refer to the constructions formed with *kosyny* 'to order' and *lez'yny* 'to let' as causatives rather than as permissives. This has two reaons. On the one hand, following Pylkkänen (2002, 2008) the dissertation proposes a unified analysis of *kosyny* 'to order' and *lezhyny* 'to let' constructions and morphological causatives. On the other hand, according to Kondratjeva (2009) the constructions formed with *kosyny* 'to order' are interchangeable with the morphologically marked causatives presented in Chapter 3.

4.2   The distribution of periphrastic causatives in Udmurt

In Udmurt, the complement of causative verbs can be both embedded finite and nonfinite clauses. The nonfinite clause is formed with an infinitive, while the finite clause is formed with a subjunctive verb. In the following sections, I discuss the similarities and differences between the finite and nonfinite complements of these verbs.

4.2.1   *Verb + infinitival complement*
The *kosyny* 'to order' light verb can be used with unergative (4a), with unaccusative (4b) and with transitive (4c) infinitive verbs forming nonfinite constructions:

(4)   a. *Sasha   Masha-jez ekty-ny   kosiz.*
        Саша   Маша-ез   экты-ны   косӥз
        Sasha.NOM Masha-ACC dance.INF   order.PST.3SG
        'Sasha ordered Masha to dance.'

        b. *Sasha   pinaljos-ty   sajka-ny   kosiz.*
        Саша   пиналъёс-ты сайка-ны   косӥз
        Sasha.NOM kids-ACC   wake.up-INF   order.PST.3SG
        'Sasha ordered/made the kids (to) wake up.'

        c. *Sasha   anaj-ez   pinaljos-ty   sajkatyny   kosiz.*
        Саша   ана-ез   пиналъёс-ты сайкатыны   косӥз
        Sasha.NOM mother-ACC   kids-ACC   wake.up.INF   order.PST.3SG
        'Sasha ordered/made the mother (to) wake up the kids.'

    The syntactic properties of the light verb *lezhyny* 'to let' are similar to those of *kosyny* presented above, namely it can be merged with unergative (5a), unaccusative (5b) and transitive (5c) verbs:

(5)   a. *Sasha   Masha-jez ektyny   lez'iz.*
        Саша   Маша-ез   экты-ны   лэзиз.
        Sasha.NOM Masha-ACC dance-INF   let.PST.3SG
        'Sasha let Masha dance.'

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b. *Sasha   pinaljos-ty   sajkany   lez'iz.*

  Саша   пиналъёс-ты сайка-ны   лэзиз

  Sasha.NOM kids-ACC   wake.up-INF let.PST.3SG

  'Sasha let the kids wake up.'

c. *Sasha   anaj-ez   pinaljos-ty   sajkatyny   lez'iz.*

  Саша   ана-ез   пиналъёс-ты   сайкатыны   лэзиз

  Sasha.NOM mother-ACC kids-ACC   wake.up.INF let.PST.3SG

  'Sasha let the mother wake up the kids.'

As opposed to languages like Spanish in which the case encoding of the causee argument depends on the type of the verb, in Udmurt the causee is encoded with ACC case regardless of the predicate (as in 6a-c).[76] However, like in the case of morphological causatives, the causee can be marked with INST as well. The choice between ACC and INST depends on the indirect-direct nature of the causing event:[77]

(6) a. *Sasha   tölen   jyrsijez   kvas'tyny lez'iz.*

    Саша   тӧлэн   йырсиез   куасьтыны лэзиз

    Sasha.NOM wind.INST hair.ACC   dry.INF   let.PST.3SG

    'Sasha let the wind to dry his hair.'

---

[76] In Spanish the case of the causee argument depends on the nature of the embedded verb: transitive verbs trigger DAT case, while intransitives trigger ACC case:

(i) *Lo   hice   ilorar.*   intransitive complement
    he.ACC   made.1SG cry
    'I made him cry.'

(ii) *Le   hice   leer   el   libro.*   transitive complement
    he.DAT   made. 1SG read   the   book
    'I made him read the book.'

                          (Tubino Blanco 2011:214)

[77] This is similar, for instance, to Mexican Spanish (Treviño 1994):

(i) *Él   la   hizo   confesar su culpa.*   direct
    he.NOM   she.ACC   made.3SG confess   his fault
    'He made her confess his fault.'

(ii) *Él   le   hizo   confesar su culpa.*   indirect
    he.NOM   she.DAT   made.3SG confess   his fault
    'He made her confess his fault.'

                          (Treviño 1994:108)

b. *Sasha   Mashajez   jyrsijez   kvas'tyny   lez'iz.*
Саша   Машаез   йырсиез   куасьтыны лэзиз
Sasha.NOM Masha.ACC hair.ACC   dry.INF   let.PST.3SG
'Sasha let Masha to dry his hair.'

4.2.3   *Verb + subjunctive complement*

As shown above, both *lez'yny* 'to let' and *kosyny* 'to order' are compatible with infinitives. Another common property of the two verbs is that they are also compatible with subjunctive complement clauses, as shown in the following examples:

(7) a. *Mon   lez'i,   Sasha   med   ektoz   shuysa*[78]
Мон   лэзи,   Саша   мед   эктоз   шуыса
1SG   let.PST.3SG   Sasha.NOM PRT   dance.FUT.3SG that
'I let Sasha to dance.'

b. *Mon   kosi,   Sasha   med   ektoz   shuysa*
Мон   коси,   Саша   мед   эктоз   шуыса
1SG   order.PST.3SG Sasha.NOM PRT   dance.FUT.3SG that
'I ordered Sasha to dance.'

The syntactic property that verbs with a causative meaning in periphrastic causative constructions are compatible both with infinitival and with subjunctive complements is attested cross-linguistically; compare the examples from Hungarian (8) or from Spanish (9):

---

[78] The subjunctive in Udmurt is formed with the combination of the *med* subjunctive particle and the verb marked by future tense. Subunctives can function both as matrix and as embedded clauses:

(i) *Sasha   med   ektoz.*
Саша   мед   эктоз.
Sasha.NOM PART   dance.FUT.3SG
'Let Sasha dance.'
(ii) *Mynam   pote,   ton   med   bertod   (shuysa)*
Мынам   потэ,   тон   мед   бертод   (шуыса)
I.GEN   go.OUT.PRES.1SG you.NOM PART go.home.FUT.2SG that
'I would like you to go home.'

(11) a. *Mon   kosi,   pinaljos   med sajkalozy   (shuysa)*

      Мон   косй,   пиналъёс   мед сайкалозы   (шуыса)

      1SG   order.PST.1SG   children.NOM PRT wake.up.FUT.3PL (that)

      'I ordered the children to wake up.'

  b. *Mon   lez'i,   pinaljos   med sajkalozy   (shuysa)*

      Мон   лэзи,   пиналъёс   мед сайкалозы   (шуыса).

      1SG   let.PST.1SG   children.NOM PRT wake.up.FUT.3PL (that)

      'I let the children to wake up.'

(12) a. *Mon kosi,   anaj   pinaljosty   med sajkatoz   (shuysa)*

      Мон косй,   анай   пиналъёсты мед сайкатоз   (шуыса)

      1SG order.PST.1SG mother.NOM children.ACC PRT   wake.up.FUT.3SG (that)

      'I ordered the mother to wake up the children.'

  b. *Mon   lez'i,   anaj   pinaljosty   med sajkatoz   (shuysa)*

      Мон лэзи,   анай   пиналъёсты мед сайкатоз   (шуыса)

      1SG let.PST.1SG   mother.NOM   children.ACC PRT wake.up.FUT.3SG (that)

      'I let the mother to wake up the children.'

In the case of causative verbs with finite complement clauses, the causee argument bears ACC case in the matrix clause, similarly to the nonfinite counterparts:

(13) a. *Mon   Sashajez   kosi,   co   kniga   med lydzoz.*

      Мон   Сашаез   коси,   со   книга   мед лыдоз

      1SG   Sasha.ACC order.PST.1SG   3SG   book.(ACC) PRT read.FUT.3SG

      'I ordered Sasha to read the book.' (Lit. I ordered Sasha that s/he read the book.)

  b. *Mon   Sashajez   lez'i,   co   kniga   med lydzoz.*

      Мон   Сашаез   лэзи,   со   книга   мед лыдоз

      1SG   Sasha.ACC let.PST.1SG   3SG   book.(ACC) PRT read.FUT.3SG

      'I let Sasha read the book.' (Lit. I let Sasha that s/he read the book.)

Based on the data presented above, it seems to be the case that while the two lexical causative verbs have different interpretations, there is no syntactic difference between them.

4.3   Nonfinite clauses as complements of causative verbs

As shown above, the two causative verbs investigated in this chapter can take either nonfinite or finite complements. In the following paragraphs it is the syntactic properties of the nonfinite clauses that are in focus. I will investigate i) whether these are ECM or object control constructions, ii) the position of the causee, and iii) the case marking of the causee argument.

4.3.1   *Exceptional Case Marking vs. object control*

The two causative verbs – *lez'yny* 'to let' and *kosyny* 'to order' – can take infinitival complements, and in these constructions the causee bears ACC case. Consider the following example and its schematic model:

(14) a. *Mon   Sashajez   kyrzjany   kosi.*

   Мон   Сашаез   кырӟаны   косй.

   1SG   Sasha.ACC   sing.INF   order.PST.1SG

   'I ordered Sasha to sing.'

   b. NPNOM NPACC VINF VFIN

The data discussed so far are compatible with two different syntactic structures for periphrastic causatives: *Exceptional Case Marking* (henceforth ECM) and object control (15).

(15) a. NPNOM   [NPACC VINF]   VFIN   ECM
     b. NPNOM NPACC [PRO   VINF]   VFIN   object control

Considering the two possible structures the question arises whether the ACC case marked causee is in the embedded clause as in (15a) or in the matrix clause (15b). Unlike in object control constructions, in ECM constructions there is no theta relation between the matrix predicate and the embedded subject of the infinitival clause. This means that in ECM there are no selectional requirements on the embedded subject, contrary to object control constructions

where the matrix predicate imposes selectional restrictions on the ACC marked DP. To decide whether periphrastic causatives in Udmurt are ECMs or object control constructions I will investigate: i) idioms, ii) embedded passivization and iii) adverbs.[79]

Cross-linguistically, ECM predicates allow for idioms and these idioms preserve their idiomatic readings in these constructions, as we can see in the examples from Hungarian (16a) and from English (16b).

(16) a. *Nem enged-em   a   szög-et   ki-búj-ni   a   zsák-ból.*
       not   let-1SG.DEF   the   nail-ACC   out-come-INF   the   sack-FROM
       'I do not let the cat out of the bag.'

                                          (Tóth 2000:63, 249)

    b. *He believes the cat to be out of the bag.*

The idiom *uzh pözhyny* 'work boils' means that somebody's work goes fast. Applying this diagnostic to the two causative light verbs in Udmurt, we can see that the idiom *uzh pözhyny* 'work boils' meaning somebody's work goes fast can appear as the complement clause of *kosyny/lezhyny,* and it still keeps its idiomatic reading (17).

(17) *Sasha   (solen)   uzhze   pözhyny   kosiz/lez'iz.*
     Саша   солэн   ужзе   пöжыны   косиз.
     Sasha.NOM   3sg.DAT   work.3SG.ACC boil.INF   order.PST.3SG/let.PST.3SG
     'Sasha order/let (his/her) work goes fast.'

Examining the passivization of the embedded clause is also a good diagnostic for teasing apart the difference between ECM and object control constructions. Passivization substantially changes the original meaning of the infinitive in the case of control but not in the case of ECM, as illustrated with the English examples in (18) and (19).

(18) *He persuaded the doctor [PRO to examine David].*   control
     He persuaded David [PRO to be examined by the doctor].

---

[79] I thank Balázs Surányi for useful comments on the diagnostics of ECM vs. object control in Udmurt.

(19) *He wants [the doctor to examine David].*   ECM

      He wants [David to be examined by the doctor].

In the case of the predicates *kosyny/lez'yny,* passivization gives a result that is similar to the English ECM constructions in example (19). Consider the following Udmurt sentences (20):

(20) a. *Masha   Sashajez   pös'anajez   pyrany   kosiz.*
         Маша   Сашаез   пӧсянаез   пыраны   косиз.
         Masha.NOM   Sasha.ACC   grammy.ACC   visit.INF   order.PST.3SG
         'Masha ordered Sasha to visit granny.'

      b. *Masha   pös'anajez   pyramyn   (Sashaen)   kosiz.*
         Маша   пӧсянаез   пырамын   Сашаен   косиз.
         Masha.NOM   grammy.ACC   visit.PASS Sasha.ACC order.PST.3SG
         'Masha ordered Sasha to visit granny.' (Lit.: Masha ordered the granny to be visited by Sasha.)

The position of adverbs can also help us to identify the position of the ACC marked argument. In object control constructions an adverb belonging to the embedded clause cannot appear between the matrix subject and the Accusative marked argument, as schematically illustrated in (21a). If the adverb appears in this position, it can be concluded that the only possible structure is the one in (21b), which is an ECM construction.

(21) a. *[S1 ADV2 O1 [PRO V2] V1]   object control
      b. [S1 [ADV2 S2 V2] V1][80]   ECM

---

[80] It is important to note that ECM is possible only if ADV2 can precede S2 in embedded clauses in general (Balázs Surányi p.c.), which is the case in Udmurt, as illustrated in example (i).

(i) *Sasha   Mashajez   kuriz,   kvaratek   co   jyrsize   med   kuastoz   shuysa.*
    Саша   Машаез   куриз,   куаратэк   со   йырсизе   мед   куасьтоз   шуыса.
    Sasha.NOM   Masha.ACC   ask.PST.3SG voice.ABESS 3sg   hair.3SG.ACC PRT   dry.FUT.3SG   that
    'Sasha asked Masha that she would dry her hair quietly.'

Contrary to adverbs in the embedded clause, matrix adverbials can appear after the Accusative marked argument only in the control construction, and they cannot appear between the Accusative marked argument and the embedded verb in ECM constructions (22).

(22) a. [S1 O1 ADV1 [PRO V2] V1]   object control

     b. * [S1 [S2 ADV1 V2] V1]   ECM

Observing the positions of an adverb in Udmurt, the following possibilities can be found (23)-(24).[81]

(25) a. *Mon*   *<lek*   *kvaraen*   *kosi>*   *Sashajez*   *jyrsize*   *kuastyny*

        мон   лек   куараен   косй   Сашаез   йырсизэ   куасьтыны

        1SG   angry   voice.INST   order.PST.1SG   Sasha.ACC   hair.3SG.ACC dry.INF

        <lek   *kvaraen*   *kosi>*.

        лек   куараен   косй

        angry   voice.INST   order.PST.1SG

        'I angrily ordered Sasha to dry her hair.'

     b. **Mon*   *<kosi>*   *Sashajez*   **lek**   **kvaraen**   *jyrsize*   *kuastyny*

        мон   косй   Сашаез   лек   куараен   йырсизэ   куасьтыны

        1SG   order.PST.1SG Sasha.ACC   angry   voice.INST   hair.3SG.ACC dry.INF

        <kosi>.

        косй

        order.PST.1SG

        *'I angrily ordered Sasha to dry her hair.'

---

[81] Since I could not find any differences between *kosyny* and *lez'yny* regarding the position of the adverbs in the clauses, for the sake of simplicity, I illustrate the test only with *kosyny*.

(26) a. *Mon*   *<kosi>*   [*Sashajez* <kvaratek>   *jyrsize*   <kvaratek>

мон   косй   Сашаез   куаратэк   йырсизэ   куаратэк

1SG   order.PST.1SG Sasha.ACC voice.ABESS hair.3SG.ACC voice.ABESS

kuastyny]   *<kosi>*.

куасьтыны   косй

dry.INF   order.PST.1SG

'I ordered Sasha to dry her hair quietly.'

b. **Mon*   *<kvaratek>*   *<kosi>*   *< kvaratek>*   *Sashajez*   *jyrsize*

мон   куаратэк   косй   куаратэк   Сашаез   йырсизэ

1SG   voice.ABESS   order.PST.1SG voice.ABESS   Sasha.ACC hair.3SG.ACC

kuastyny   *<kosi>*.

куасьтыны   косй

dry.INF   order.PST.1SG

*'I ordered Sasha to dry her hair quietly.'

On the basis of the diagnostics presented above, I conclude that analytic causatives formed with the light verbs *kosyny* 'to order' and *lez'yny* 'to let' are both ECM constructions.

4.3.2   *The syntactic position of the causee*

Similarly to morphological causatives, the exact position of the causee argument in the argument structure of periphrastic causatives, too, needs to be investigated.

In Italian, Folli & Harley (2003, 2007) analyze the causee as an external argument of the base predicate and take the lexical causative *fare* to be a functional head in the structure, as illustrated in (27):

(27) a. *Gianni ha   fatto riparare la   macchina a Mario*

Gianni   has   made repair   the   car   to Mario

'Gianni made Mario repair the car.'

(Folli & Harley 2007:207)

b.
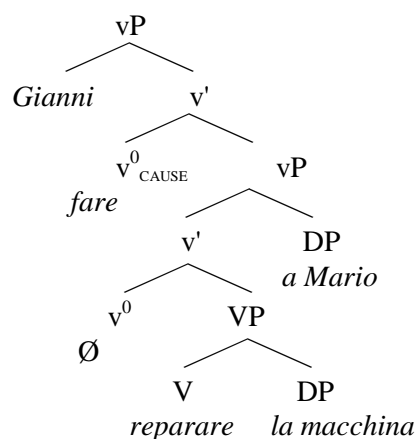
In the structure in (27b), v^0_{CAUSE} selects an agentive vP as its complement, and the causee sits in the specifier position of the vP to the right of this vP, following the syntactic rules of Romance languages.[82] The agentive vP licenses an external argument that becomes the causee argument in the complex structure of the causative.[83] The absence of the causee argument with the functional verb *fare,* known as the *Obligation Effect* (Folli & Harley 2007), is a consequence of the [+agentive] feature of the external argument. External arguments with a [–agentive] feature are prohibited in Italian.

(28) *Gianni ha fatto rompere la finestra a Maria/*al ramo.*

'John got Maria/*the branch to break the window.'

(Folli & Harley 2007:20b)

Tubino Blanco (2011) argues that in contrast to Italian, in Spanish the *Obligation Effect* observed by Folli & Harley (2007) does not exist. The causee can have [±agentive] features, only the [animacy] feature is in the scope of the restriction. DPs with a [+animate] feature can function as causees, but DPs with a [–animate] feature cannot.

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[82]   This syntactic property of Romance languages is not discussed here, for details see Folli & Harley (2007).

[83]   The absence versus presence of the external argument of the *v*P embedded under *fare* can be derived from the syntactic position of *fare,* as argued by Folli & Harley (2007). The *fare* discussed in this section is a funtional head licensing an external argument. The *fare* lacking this argument (and so lacking an agentive *v*P) is a lexical verb. For more details on this double position of *fare,* see section 5.

(29) a. *La mala suerte le   hizo   a Juan ser   arrestado t$_{Juan}$*

       the bad luck he.DAT made.3SG to John be   arrested

       'Bad luck made John to be arrested.'

    b. **Juan hizo   ser   devueltos los cuadros   al   museo*

       John   made   be   returned   the paintings   to.the museum

       'John had the paintings returned to the museum.'

<div align="right">(Tubino Blanco 2011:64)</div>

Adopting a syntactic structure similar to the structure of morphological causatives, Tubino Blanco (2011) argues that the causee argument is introduced at the VoiceP level of the derivation in both Italian and in Spanish, and there is a parametric variation between these languages with respect to what features of the Voice head are affected by the *Obligation Effect*.

In Udmurt, periphrastic causatives are external causatives similarly to morphological causatives, thus the causee argument of the construction can have either a [+agentive] or a [–agentive] feature.

(30) a. *Sasha   tölen   jyrsijez   kvas'tyny leziz.*

       Саша   тӧлэн   йырсиез   куасьтыны лэзиз

       Sasha.NOM wind.INST hair.ACC   dry.INF   let.PAST.3SG

       'Sasha let the wind to dry his hair.'

    b. *Sasha   Mashajez jyrsijez   kvas'tyny leziz.*

       Саша   Машаез   йырсиез   куасьтыны лэзиз

       Sasha.NOM Masha.ACC hair.ACC   dry.INF   let.PST.3SG

       'Sasha let Masha to dry his hair.'

This property is triggered by the Cause head, because it is the Cause head under VoiceP that hosts the [+agentive] or [–agentive] feature, as was shown with morphological causatives. ACC marked causees are base generated as external arguments of the complement of lexical causative verbs, just as it was shown with morphological causatives.

If the causee is an external argument, then agent-oriented adverbials such as *on purpose* or *loudly* make the sentences ambiguous:

(31) *Sasha   juri   Mashajez   bördyny   kosiz.*
Саша   юри   Машаез   бӧрдыны   косйз.
Sasha.NOM on.purpose Masha.ACC cry.INF   order.PST.3SG
two interpretations:
'Sasha, on puspose, made Masha cry.'
'Sasha made Masha cry on purpose.'

Agent-oriented depictives can also be used as a test for external arguments:

(32) *Sasha   kudzem jyryn   Mashajez   bördyny   kosiz.*
Саша   кудӟем йырын   Машаез   бӧрдыны   косйз.
Sasha.NOM   drunk   head.INST Masha.ACC cry.INF   order.PST.3SG
'Sasha made Masha cry drunk.'

As Pylkkänen (2002) argues, only high applicatives and external arguments can be modified by a depictive, so the example in (32) shows that the causee is the external argument of the base predicate.

4.3.3. *Towards the extensive use of the suffix* -ez/jez
In the course of this work the functions of the suffix *-ez/jez* were discussed from time to time. As discussed in the Introduction, the *-ez/jez* morpheme is the grammaticalized ACC case in Udmurt. The suffix appears in analytic causatives as well, since in ECM constructions the causee argument bears ACC case. Similarly to factitives, where the causee is always marked with the suffix, in these periphrastic causatives the same phenomenon is observed, i.e. the causee is always marked regardless of its specificity. However, the diachronic data show a different picture.

In the collection of Wichmann (1901), which mainly contains folksongs and folk tales, the causee argument is not always marked with ACC case in analytic causatives. Consider the following text from a folk song (the relevant causative sentences are marked with bold face):

(33)   *so   pits'i korka-n   vylem   odig peres' kyshno*

       that little house-INE AUX   one old   woman

       so   peres' kyshno so   nyl   min'ts'o   estyny kosem

       that old   woman that girl sauna   to.heat ordered

       nyl-yz   min'ts'o-ze   estem

       girl-POSS.3Sg sauna-POSS.ACC heated

       no   so   peres' kyshno [. . .] shuem

       and that old   woman [. . .] said

       nyl so   pits'i korka   pyrem

       girl that little house   entered

       no   otyn vylem peres'   kyshno

       and there AUX   old   woman

       so   peres' kyshno so   nyl-ez min'ts'o estyny kosem

       that old   woman that girl-ACC   sauna   to.heat ordered

       nyl min'ts'o-jez   estem, no   peres' kyshno [. . .] shuem

       girl sauna-ACC   heated   and old   woman [. . .] said

       'There was an old woman in that little house. The old woman ordered the girl to heat a sauna. The girl heated the sauna and the old woman said … A girl entered into that little house and there was an old woman. That old woman ordered the girl to heat a sauna. The girl heated the sauna and the old woman said … .'

                                                                              (Wichmann 1901:text 7)

Fraurud (2001) argues that in these sentences the extensive associative use of the possessive suffix can be observed, since *-ez/jez* appears only in the second instance of the sentence.

The obligatory markedness of the causee argument has developed from the beginning of the 20th century. I assume that similarly to Differential Object Marking and to the markedness of the causee argument in factitives, the use of the suffix *-ez/jez* is derived by discourse factors such as associatibility in this case, too.

4.3.4   *The syntactic structure of periphrastic causatives with an infinitival complement*

Across languages, periphrastic causative constructions involve two verbal items: a finite light verb in the matrix clause and depending on the finite/non-finite property of the embedded clause, a finite verb or an infinitive. In both cases the two predicates are each associated with

an event, a causing event and a caused event respectively, thus these constructions are essentially bi-eventive. One of the diagnostics for the bi-eventive property is modification, as shown in Chapter 3 for factitives. If an event modifier is added to the structure of bi-eventives, the modifier triggers ambiguity. This is due to the fact the modifier can adjoin to two different projections, either to the matrix VP or to the embedded VP, as illustrated with Italian (34a) and German examples (34b).

(34) a. *Adele   ha   fatto cuocere il   maiale   con   un limone in bocca.*
Adele   has   made cook   the   pork   with a lemon   in mouth.
Ambiguity:

 (i) 'Adele had the pork cooked with a lemon in its mouth.'

 (ii) 'Adele had a lemon in her mouth when she had the pork cooked.'

<div align="right">(Guasti 1993:42)</div>

 b. *weil   er die Ärzte   seinen Bruder schnell operieren lässt.*
because he the   doctors his   brother quickly operate   let
Ambiguity:

 (i) 'because he made the doctors operate his brother quickly.'

 (ii) 'because he quickly made the doctors operate his brother.'

<div align="right">(Campanini & Pitteroff 2012:2)</div>

Adopting this diagnostic to Udmurt analytic causatives, the result is similar to other languages: the inclusion of the modifier results in ambiguity.

(35) *Sasha   Mashajez pös'anaj   dory <dzhog> byzysa   vetlyny*
Саша   Машаез   пӧсьанай   доры жог   выжыса   ветлыны
Sasha.NOM Masha.ACC grammy.NOM to   quickly   running   go.INF
<dzhog> kosiz.
 жог   косйз.
quickly order.PST.3SG
Ambiguity:

 (i) 'Sasha quickly ordered Masha to run to the granny.'

 (ii) 'Sasha ordered Masha to run quickly to the granny.'

The diagnostic with participles used for testing the bi-eventive property of factitives (see Chapter 3, section 3.6.3) can also be adopted for causatives with light verbs.

(36) *Sasha   Masa-jez   muzjem   vylyn   kyl'l'ysa   kyrzhany   kosiz.*
Саша   Маша-ез   музъем   вылын   кыллльыса   кырӟаны   косӥз.
Sasha.NOM Masha-ACC   ground   on   lying   sing.INF   order.PST.3SG
Ambiguity:
(i)   'Sasha ordered Masha to sing lying on the ground.'
(ii)   'Sasha lying on the ground ordered Masha to sing.'

On basis of these tests there is no doubt that analytic causatives are bi-eventive in Udmurt as well, since this is an inherent property of causatives. It is more interesting to examine the clausality of analytic causatives, because it is a debated issue whether analytic causatives with infinitival complements are bi-clausal or not. Kayne (1975), Burzio (1986) and Bartos (2011) (see Chapter 1, section 1.6) argue that syntactic causatives are bi-clausal in nature.

Causative light verbs can be divided into two different groups: i) light verbs that embed VoiceP but not TP (cf. Guasti 1993, 1997, Folli & Harley 2003 for Italian; Treviño 1994 for Spanish, Tubino Blanco 2011 for English and for Spanish, and others) and ii) light verbs that embed CP. The first group contains verbs like *make* in English (Tubino Blanco 2011) or *fare* 'to make' in Italian (Guasti 1993).

This syntactic property can be diagnosed with the negation test, the perfective *have* test and the TP adverb test in English (37a-c) and in Italian (38a-b):

(37) a. *I made John not read the paper.*
b. *I'll make my child have cleaned the house by Wednesday.*
c. *Today I'll make my child clean the house tomorrow.*

(Tubino Blanco 2011:137)

(38) a. ?*Ció   ha   fatto non   parlare (piú)   Maria.*
That has   made not   speak   (anymore) Mary
'That made Maria not speak anymore.'

b. *Marco farà   aver pulito   le   toilette   al   generale

Marco   make(FUT) have cleaned the   toilet   to.the general

'Marco will make the general have cleaned the toilet.'

c. #Ieri   Marco ha fatto pulire   le toilette   al   generale oggi

yesterday   Marco has made cleaned the toilet   to.the general today

'Yesterday Marco made the general clean the toilet today.'

(Guasti 1993)

In English, for instance, the functional causative verb *make* selects VoiceP, which is clearly seen because it can never appear together with an infinitival embedded clause:[84]

(39)   *I made John to read.

In contrast to the functional verb *make*, the verb *cause* takes a CP complement in English:

(40)   a. *I caused Mary to fail.*
       b. *Mary was caused to fail.*

(Tubino Blanco 2011:164)

The CP complement contains a nonfinite T, as shown by the negative and perfective tests:

(41)   a, *Maryland reports state tests caused eleven students not to graduate.*
       b. *This is what caused him to have been killed.*

(Tubino Blanco 2011:164)

Campanini & Pitteroff (2012) also argue against a unified treatment of analytic causatives across languages. They assume that at least two types of analytic causatives exist in natural languages. The first one is where the causative light verb can optionally select a CP complement and the second type is where the causative light verb is obligatory combined with

---

[84]   However, the passive form of the productive causative *make* takes a 'to' infinitival complement. (i).

(i) *He was made to read a book.*

a bare infinitival complement. Languages such as German and Italian behave in the latter way.

(42) a. *Ich liess, dass Maria den Raum verlässt.

       I   let   that Mary the   room   leaves

      'I made that Mary leaves the room.'

    b. *Ho fatto che Giovanni usciva.

      Have made that Giovanni leave

      'I made that Giovanni was leaving.'

                                 (Campanini & Pitteroff 2012:6)

This test is empirical evidence that there are languages where the causative light verb can only select an infinitival complement without a CP-layer, and this complement lacks sentential status.[85]

Since in Udmurt causative light verbs can select an embedded clause with or without a CP layer, further discussion of the bi-clausal property is not relevant here. I propose that in Udmurt analytic causatives are bi-clausal and bi-eventive.

However, in the case of infinitival complements the size of the infinitival embedded clause is still an open question.

As shown in the previous sub-section, in Udmurt causatives formed with embedded infinitives are ECM constructions. ECMs lack the CP-layer, but further investigation could be necessary to see whether these embedded clauses contain a TP layer or not. To investigate this, we can test whether temporal modifiers can modify the caused event independently from the matrix event.

(43) Sasha Masahjez chukaze bibliotekaje vetlyny kosiz.

    Саша Машаез ӵуказе библиотекае ветлыны косйз.

    Sasha.NOM Masha.ACC tomorrow library.ILL go.INF order.PST.3SG

    'Sasha ordered Masha to go to the library tomorrow.'

---

[85] Campanini & Pitteroff (2012) also use other tests not discussed here, such as the characteristics of restructuring constructions/mono-sentential construals proposed by Wumbrand (2001) and long passivization.

I can conclude that since the temporal modifier 'tomorrow' can be attached to the caused event, there is a TP layer present in the structure.

As observed above, the causee argument of analytic causatives is the external argument of the embedded clause. Following the assumption discussed in the course of this work, namely that the external argument is introduced into the structure in the spec,VoiceP position, I propose the following syntactic structure for periphrastic causative constructions with embedded infinitival complements.

(44)

```
                    VoiceP
                   /      \
               Spec      Voice'
                        /      \
                   Voice        vP
                               /    \
                          vCAUSE     TP
                                    /   \
                                 Spec    T'
                                        /   \
                                 T_NON-FINITE  VoiceP
                                              /      \
                                          Spec      Voice'
                                                   /      \
                                               Voice        vP
                                                           /    \
                                                          v      ...
```
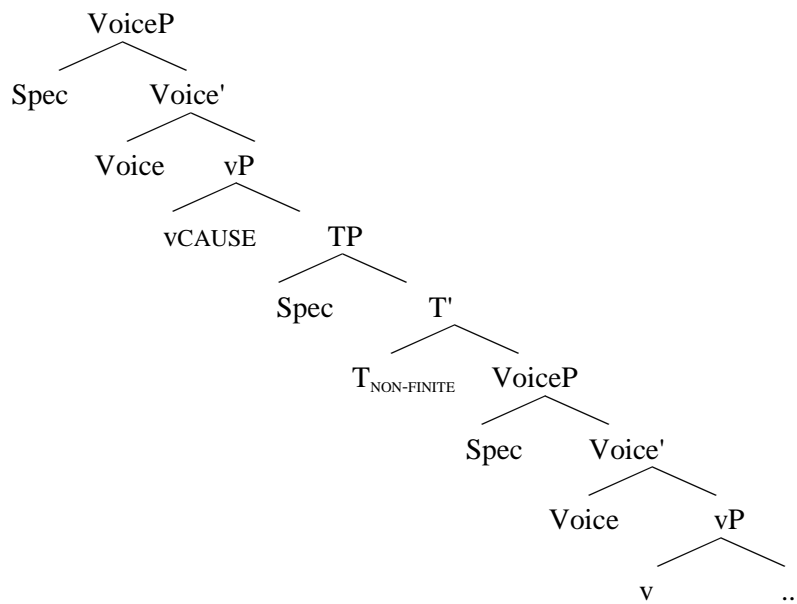
Similarly to synthetic causatives, in periphrastic causatives the causer argument can have only a [+agentive] feature.

(45) *Töl   pinaljos-ty   sajkany   lez'iz.
     *Тöл   пиналъёс-ты   сайка-ны   лэзиз
     wind.NOM   kids-ACC   wake.up-INF   let.PST.3SG
     '*The wind let the kids wake up.'

This is different from what we see with functional causative predicates like *hacer* 'to make' in Spanish or *fare* 'to make' in Italian, since those predicates can appear either with agentive or non-agentive causers (Tubino Blanco 2011):

(46) a. *Juan hizo que el maestro castigara a los niños*

John made that the teacher punished.3SG to the kids

'John caused the teacher to punish the kids.'

    b. *La pelea hizo que el maestro castigara a los niños*

the fight made that the teacher punished.3SG to the kids

'The fight caused the teacher to punish the kids.'

(Tubino Blanco 2011:238)

4.4   Phase-selecting causatives

Chomsky (2001, 2008) assumes that derivations are processed cyclically as phases (*Phase Theory*). In Chomsky's (2008) proposal CPs, v*Ps and also DPs are phases, and the phase head (C or v*) hosts the uninterpretable features (phi-features, Case, etc). These features can be inherited by lower projections such as T or Neg heads.

In hertheory of causativization, Pylkkänen proposes that causative light verbs such as *make* in English are Phase-selecting causatives.

(48)

```
            TP
         /      \
      Spec      T'
             /     \
           T       VoiceP
                 /    \
               DP     Voice'
                    /      \
                 Voice      vP
                          /    \
                         v      ...
```
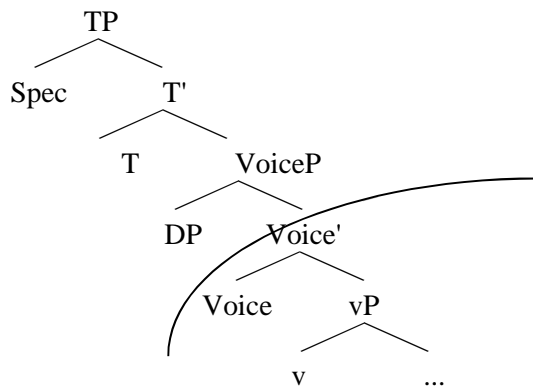
(Tubino Blanco 2011:120)

4.4.1   *The finite clause as a Phase*

On the basis of the empirical data the following syntactic structure is proposed for the periphrastic causative constructions in Udmurt (49) when the causative predicate is combined with a finite clause.[86]

(49)

```
         VoiceP
        /     \
     Spec     Voice'
            /      \
         Voice      vPcause
                  /      \
               vcause     CP
                        /    \
                       TP
                     /    \
                  Spec     T'
                        /    \
                       T     VoiceP
                            /    \
                         Spec     Voice'
                                /      \
                             Voice      vP
                                      /    \
                                     v      ...
```

---
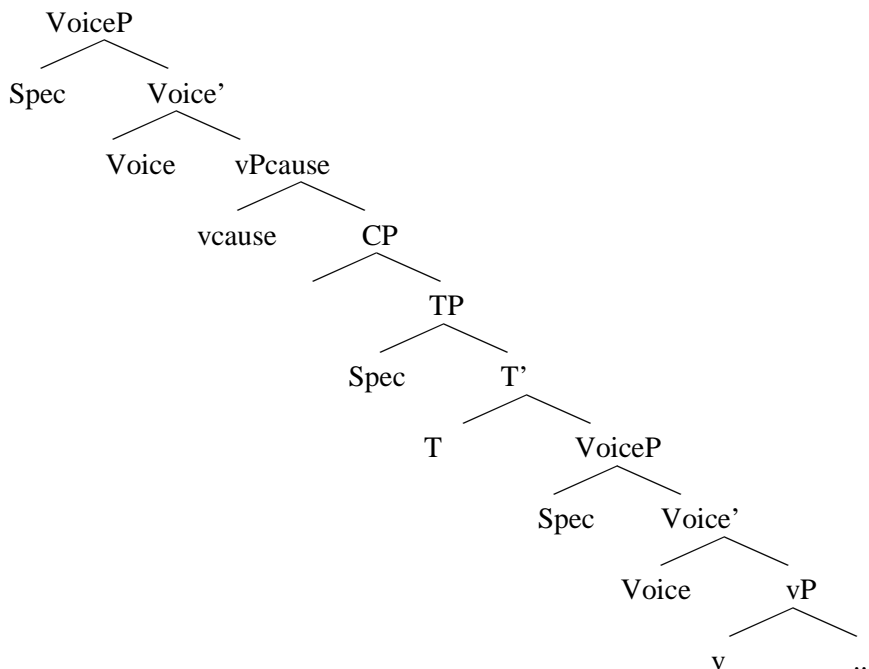
[86] This syntactic modell, similarly to the earlier ones, is a simplified version; it lacks all the non-relevant projections.

This diagram in (49) suggests that the causative ligh verb is in the v_{CAUSE} position, and it selects a full CP as its complement. Since CPs are Phases in Chomsky's (2008) proposal, it can be concluded that causative light verbs in Udmurt are Phase-selecting in the sense of Pylkkänen (2002, 2008).

4.4.2   *Is the nonfinite clause a Phase?*

As argued above, in Udmurt periphrastic causatives with non-finite complements are ECM construtions. This suggests the following syntactic representation (50):

(50)

```
                VoiceP
               /      \
            Spec      Voice'
                     /      \
                 Voice      vPcause
                           /       \
                      vcause        TP
                                   /   \
                                Spec    T'
                                       /   \
                          T_NON-FINITE     VoiceP
                                          /      \
                                      Spec        Voice'
                                                 /      \
                                             Voice       vP
                                                        /   \
                                                       v     ...
```

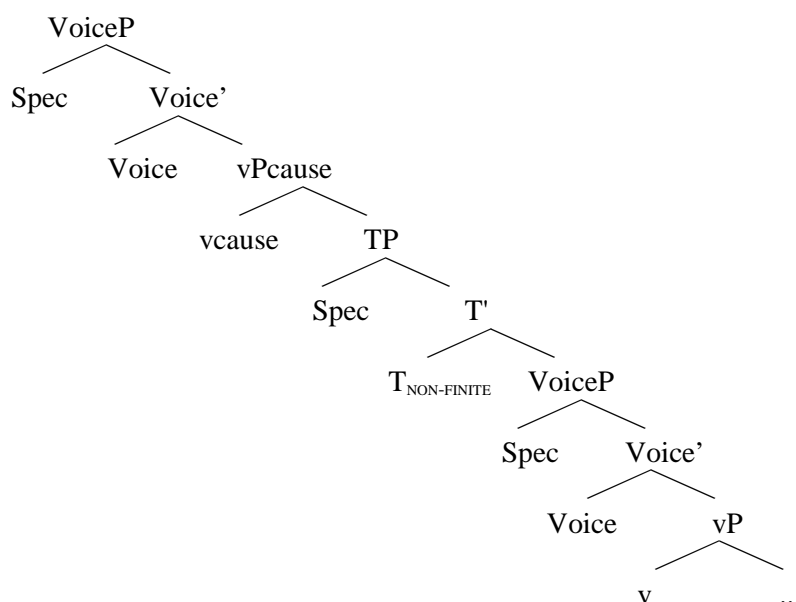Analytic causatives with non-finite complements have a different syntactic structure, however, as shown in (50). The causative light verbs are in v_{CAUSE}, because the syntactic position of the verb in the matrix clause is the same, but in these constructions the v_{CAUSE} head selects a TP as its complement instead of a full CP.

In Chomsky's (2008) assumption the T head is not able to host the relevant agreement features. It can only inherit them from the C head, because the C head is able to select tense. If the C head lacks tense features then ECM, raising or infinitival constructions appear. This means that TPs are never Phases in Chomsky's (2008) theory.

Baltin (2007), Aelbrecht (2010) and Tubino Blanco (2011), among others, argue that VoiceP is a clause-internal phase that selects different kinds of *v* heads, as opposed to CP, which is a

clause-peripheral phase head and selects different kinds of TPs. But I have shown that in Udmurt ECM structures involve an embedded TP, since they can have they own temporal adverbial, as exemplified in (43), repeated here as (51).

(51) *Sasha   Masahjez chukaze   bibliotekaje vetlyny   kosiz.*
     Саша   Машаез   ӵуказе   библиотекае ветлыны   косӥз.
     Sasha.NOM Masha.ACC tomorrow   library.ILL   go.INF   order.PST.3SG
     'Sasha ordered Masha to go to the library tomorrow.'

The proposal that in Udmurt causative light verbs can select TP, a non-phase projection, goes against Pylkkänen's (2002, 2008) assumption that there are only Root-selecting, VP-selecting and Phase-selecting causatives across languages.

Two possible solutions arise for this problem: i) Pylkkänen (2002, 2008) was wrong and causative light verbs can select not just a Phase but also a projection between the CP and the First Phase or ii) the analysis of the non-finite complements of causative verbs must be revisited; maybe they are CPs and not ECMs. Neither of these solutions will be discussed here since both of them go beyond the scope of this dissertation. I leave this question open for future research.

4.5   Summary

In this chapter the syntactic properties of periphrastic causatives have been investigated. I discussed the properties of two lexical causative verbs in Udmurt: *lez'yny* 'to let' and *kosyny* 'to order'.

The syntactic properties of the two verbs seem to be similar. Both can have non-finite and finite complements. The finite clauses are CPs, which do not mean problem for the Pylkkänen's (2002, 2008) assumption that causative verbs are Phase-selecting causatives. But non-finite complements of causative verbs are ECM constuctions. This suggests that these constructions are TPs rather than CPs or VoicePs, and TPs are never Phases (see Chomsky 2008). This result challenges Pylkkänen's (2002, 2008) theory of Phase-selecting causative verbs.

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CHAPTER 5

Conclusion

5.1 The main contributions of the dissertation

The aim of this thesis was to investigate causative constructions containing lexical, syntactic and periphrastic causatives in the Udmurt language within the framework of *Distributed Morphology* (Halle & Maranzt 1994) and on the basis of Pylkkänen's (2002, 2008) theory of causatives, which assumes that VoiceP and CauseP are separate projections.

In the course of this thesis I proposed that traditionally called lexical, morphological and syntactic causatives are all formed in the syntax with a functional projection CauseP. This projection is responsible for the causing event, as argued by Pylkkänen (2002, 2008).

In the Udmurt language the head of this projection can be filled or it can be phonetically null. If it is filled then it is always filled with the morpheme *-t-*, which is the phonological realization of the causing event in this language. This means that the causative morpheme *-t-* appears either as a VP-selecting causative or a Phase- selecting causative (in the sense of Pylkkänen 2002, 2008), depending on the projection to which it is attached.

Causative constructions in Udmurt are similar to the causatives analyzed cross-linguistically, though all of the three types (i.e. lexical, factitive and analytic causatives) show some special syntactic properties which are not attested in any other languages.

In the case of lexical causatives, in the causative/non-causative alternation there are some non-causative verbs which allow an agentive causer as an adjunct. This proposerty has not been observed for non-causatives cross-linguistically. This special property of these verbs suggests that the structure of these verbs contains an extra layer ($v_{trans}P$) that can host the agent causer. However, as the non-causative morpheme *-s'k-* appears in Udmurt passive or half-passive constructions as well, I cannot exclude the possibility that in these constructions the verb form is not non-causative but rather half-passive.

Factitive causatives in Udmurt also show some special syntactic properties, namely the appearance of the suffix *-ez/jez* both on the causee argument and on the theme argument, and the case-marking alternation of the causee argument. In the latter case the case-marking pattern of the causee is based on the degree of the control on the causee arugment. If the

causative activity is direct then the causee bears ACC case, while if it is indirect then the causee is encoded with INST case. Contrary to the case-pattern alternation observed in other languages, where the causee is always [+human], the indirect effect is not typical in Udmurt, since the case-alternation appears when the causee is [–human]. The possible appearance of a [–human] argument as a causee in factitives is also a special property of the language.

The double appearance of the suffix -*ez/jez* also seems problematic at first sight, since in Udmurt double-objects are not possible in ditransitive constructions, which suggests that their appearance should be not possible with factitives either. To solve this puzzle, I proposed that the appearance of the suffix on the causee arugment has a strong connection to the associative use of the suffix in the language.

The syntactic properties of periphrastic causatives in Udmurt were illustrated with two causative verbs, *kosyny* 'to order' and *lezhyny* 'to let'. Both causative verbs can select either a finite or a non-finite embedded clause as their complement. The finite clauses are CPs, which do not mean problem for the Pylkkänen's (2002, 2008) assumption that causative verbs are Phase-selecting causatives. But non-finite complements seem to be problematic. It was shown in this thesis that in Udmurt non-finite complements of causative verbs are Exceptional Case Marking constuctions and they can have their own temporal modifier. This suggests that these constructions are TPs rather than CPs or VoicePs, and TPs are never Phases (see Chomsky 2008). This result challenges Pylkkänen's (2002, 2008) theory of Phase-selecting causative verbs.

Investigating causative constructions in Udmurt has brought these special properties to light, but not all of the puzzles were solved. Some questions and problems remain for futher researche in this field.

One of these questions is what the proper syntactic and semantic features of CauseP are. This issue is discussed in detail through the following paragraphs, but only future research can provide a definitive answer to the questions that arise here.

5.2   A further research question: Is CauseP the same inside and outside of VoiceP?

During the investigation of the different types of causatives in Udmurt (lexical, morphological and periphrastic), it was shown that all types contain at least one CauseP in their syntactic structure. This is illustrated in (1):

(1) a. Lexical causative

```
                    Voice
                   /    \
              Cause
             /    \
          v
         /  \
    √root
```

b. Morphological causative

```
                        Voice
                       /    \
                  Cause
                 /    \
             Voice
            /    \
        Cause
       /    \
      v
     /  \
  √root
  /    \
√root    v
```
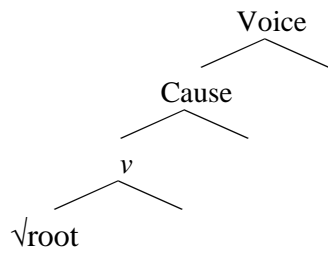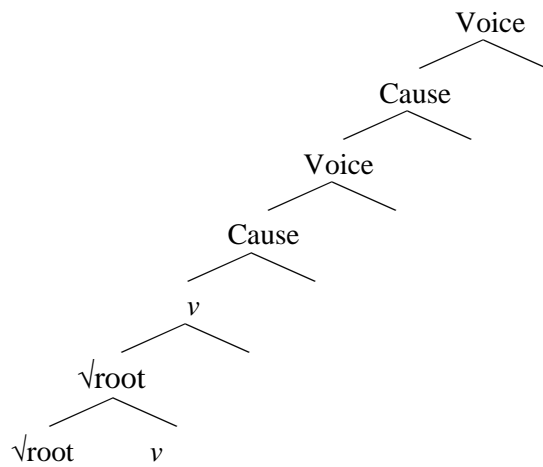
c. Periphrastic Causative with a finite complement

```
   VoiceP
   /    \
Spec    Voice'
       /    \
    Voice    vPcause
            /    \
           v      CP
                 /  \
                    TP
                   /  \
               Spec    T'
                      /   \
                     T     VoiceP
                          /    \
                       Spec    Voice'
                              /    \
                           Voice    vP
                                   /  \
                                  v    ...
```
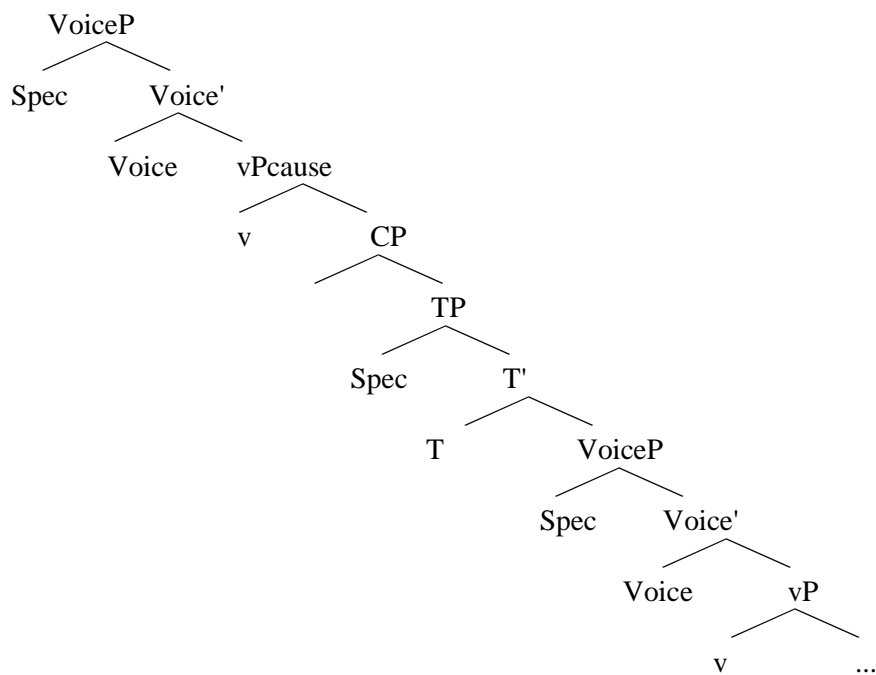
d. Periphrastic Causative with a nonfinite complement

```
              VoiceP
             /      \
          Spec      Voice'
                   /      \
                Voice     vPcause
                         /      \
                        v        TP
                               /    \
                            Spec     T'
                                   /    \
                         T_NON-FINITE   VoiceP
                                       /      \
                                    Spec      Voice'
                                             /      \
                                          Voice      vP
                                                    /   \
                                                   v     ...
```
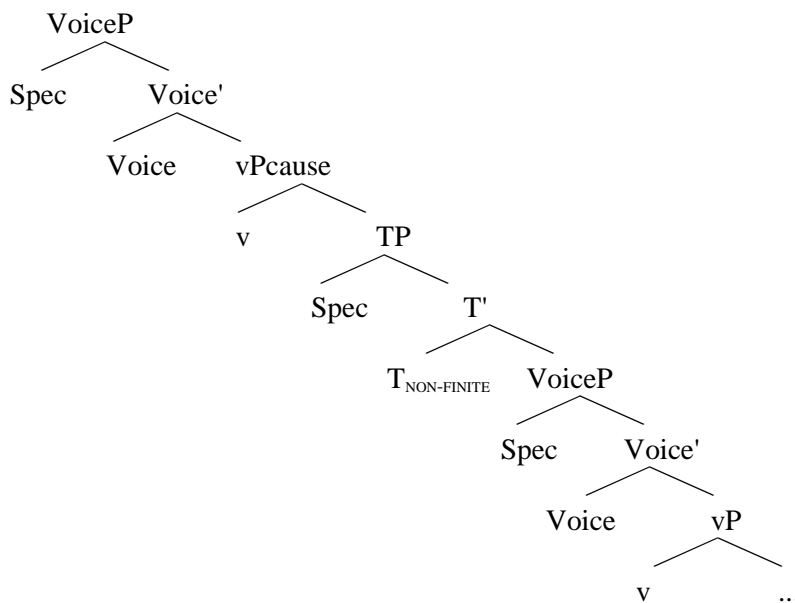
These structures raise the following question: does the same CauseP appear in all the positions, or is the projection merged lower than the VoiceP of the base predication different?

5.2.1   *Evidence for the similarity from Romance*

5.2.1.1   Italian: 'lexical' and syntactic *fare*

Folli & Harley (2003, 2007) argue that the verb *fare* 'make' is the realization of both the lexical, agentive v^0_{DO} and the functional v^0_{CAUSE} in Italian. Consider the following examples in (2) and their syntactic structures illustrated in (3):

(2)   a. *Gianni   ha   fatto riparare la   macchina* (da Mario)   lexical
          Gianni   has   made   repair   the   car   by Mario
          'Gianni had the car repair by Mario.'

      b. *Gianni   ha   fatto riparare la   macchina   a Mario*   syntactic
          Gianni   has   made   repair   the   car   to Mario
          'Gianni made Mario repair the car.'

(Folli & Harley 2007:207-208)

(3)   a.

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```
                vP
              /    \
         Gianni     v'
                  /    \
               v⁰CAUSE   vP
               fare    /    \
                     v'      DP
                   /   \    a Mario
                 v⁰     VP
                 Ø    /    \
                     V      DP
                 reparare  la macchina
```

b.

```
                vP
              /    \
         Gianni     v'
                  /    \
               v⁰DO     VP
               fare   /    \
                     VP     PP
                   /   \   da Mario
                 v⁰     DP
              reparare /    \
                     la macchina
```
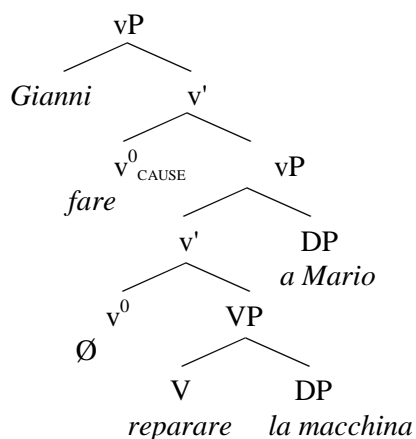
The structural difference has an effect on the syntactic representation of the causee argument. With lexical causatives (2a) the causee functions as an adjunct and so its appearance is optional. In syntactic causatives (2b), on the other hand, the causee is obligatory and it is encoded with DAT (or in some cases ACC).

Folli & Harley (2007) argue that this difference comes from fact that the syntactic Cause head (the functional head in their terminology) does not have any selectional restrictions on the external argument (causer). The lexical Cause head, however, can select only agents as causers.

Complement restriction is the other parameter that makes the two heads differ from each other. As Folli & Harley (2007) point out, while the functional head selects an agentive event (vP) as its complement, the lexical head takes a nominalized VP without its eventive layer, thus the complement lacks its own external argument.

This double behavior of the verb *fare* in Italian is similar to the verb *hacer* 'do' in Spanish.

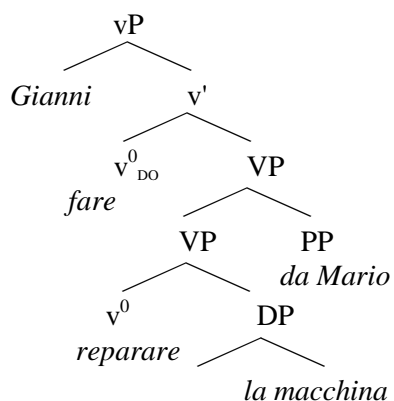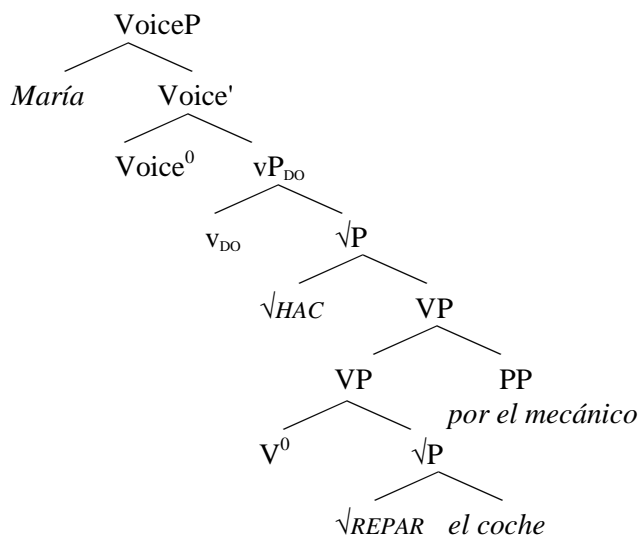### 5.2.1.2 The Spanish *hacer*

Tubino Blanco (2011) adopts the analysis of Folli & Harly (2003, 2007) and argues that in Spanish, the verb *hacer* 'do' can be the realization of both a lexical head and a functional head (4):[87]

(4) a. *María hizo repara el coche (por el mecánico).*
      Mary   made.3SG repair the car   by the mechanic
      'Mary made repair the car (by the mechanic).'

   b.

(Tubino Blanco 2011:24)

That *hacer* 'do' in Spanish can be a lexical verb is supported by the fact that the Cause head hosting the verb disallows causees as its external argument (Tubino Blanco 2011):

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[87] There is one difference between the syntactic structure proposed by Folli & Harley (2007) (illustrated in (3b)) and the structure put forth by Tubino Blanco (2011) (shown in (4b)). This difference has to do with the layer that introduces the external argument. Following Chomsky (1995), Folli & Harly (2007) label this level vP, while Tubino Blanco (2011) adopts Kratzer's (1994) theory and labels that level VoiceP. Nevertheless, it is assumed that there is no syntactic and functional difference between the two labels.

(5) *Juan/ *su   enfado hizo castigar al   niño (por   el   profesor).*
     John/   his   rage   made punish to.the child by   the   teacher
     'John/*his rage had the child punished (by the teacher).'

<div align="right">(Tubino Blanco 2011:25)</div>

The appearance of *hacer* at two distinct structural positions is shown by the interpretation of the argument marked with DAT:

(6) a. *María   le   hizo   reparar el   coche   a Pepe*
        Mary   he.DAT made.3SG repair   the   car   to Joe
        'Mary made repair Joe's car.'
        (i.e somebody elso repairs the car)

<div align="right">(Tubino Blanco 2011:27a)</div>

     b. *María   le   hizo   reparar el   coche   a Pepe*
        Mary   he.DAT made.3SG repair   the   car   to Joe
        'Mary made Joe repair the car.'

<div align="right">(Tubino Blanco 2011:27b)</div>

The sentence in (6) seems to be ambiguous. The argument marked with DAT in example (6a) is interpreted as a possessor, as opposed the DAT marked argument in (6b), which is interpreted as the causer of the causing event. If we believe that the sentence can have both meanings, the assumption of Tubino Blanco (2011) is on the right track and the *hacer* verb can appear in two different syntactic positions.

This structural difference between the two verbs inserted in two different positions of the derivation accounts for other syntactic differences as well, for instance those involving passivization or cliticization, but these differences will not be discussed here.

5.2.3   *Diagnostics of Udmurt Cause*

In constrast to the two Romance languages observed above, which lack morphological causatives, in Udmurt a similar question arises: is the Cause head hosting the *-t-* in the structure of causative verbs the same as the Cause head hosting the *-t-* morpheme functioning as the productive morpheme of causatives?

5.2.3.1   Selection

In Udmurt, the Cause outside of the first phase[88] can select different types of verbs. As observed in Chapter 3 (Factitive Causatives), the Phase-selecting Cause head hosting the causative morpheme *-t-* can be attached to unergative (7a), transitive (7b) and ditransitive (7c) verbs.

(7)   a. *Masha*   *Sasha-jez   uzha-t-iz.*
          Маша   Саша-ез   ужа-т-йз.
          Masha.NOM   Sasha-ACC work-CAUS-PST.3SG
          'Masha made Sasha work.'

      b. *Masha*   *Sasha-jez   kńiga-jez   lydzhy-t-iz.*
          Маша   Саша-ез   книга-ез   лыдӟы-т-йз
          Masha.NOM   Sasha-ACC book-ACC   read-CAUS-PST.3SG
          'Masha made Sasha read the book.'

      c. *Masha*   *Sasha-jez   Aljonaly   kńiga-jez   c'oty-t-iz.*
          Маша   Саша-ез   Алёналы   книга-ез   сёты-т-йз
          Masha.NOM   Sasha-ACC Aljona-DAT book-ACC   read-CAUS-PST.3SG
          'Masha made Sasha give the book to Aljona.'

As opposed to the verb types presented in (7), unaccusative verbs differ in the sense that if the productive causative marker is attached to an unaccusative verb in Udmurt, it results in a causative verb, as it has been shown in the causative/non-causative alternation:

(8)   a. *Pinaljos   sajkazy.*   non-causative
          Пиналъёс сайказы.
          child.PL   wake.up.PST.3PL
          'The children woke up.'

---

[88]   For the correct identification of the two Cause projections I adopt Ramchand's (2006) notion of 'first phase' for inner causativization. I refer to the Cause head hosting the productive marker as 'Cause head outside of the first phase', and I term the Cause head hosting the causative suffix attached to roots as 'Cause head inside of the first phase'.

b. *Anaj*   *pinaljosyz*   *sajkatiz.*   causative

Анай   пиналъёсыз   сайкатӥз.

mother.NOM   child.PL   wake.up.PST.3SG

'The mother woke up the children.'

This property of the causative morpheme seems not to be universal cross-linguistically, it is more like a parametric variation across languages. There are languages where unaccusatives can be selected by the Cause head even without the appearance of Voice head. Finnish, for instance, is such a language, as argued by Pylkkänen (2002, 2008):

(9)   *Minua*   *nauratta.*

I.PART   laugh.CAUS.3SG

'(Something) makes me laught.'

<div align="right">(Pylkkänen 2008:32a)</div>

Based on these data, we can see that while the two Cause heads are similar, there is a functional difference between them.

5.2.3.2   Morphological matching

The similarity between the two Cause layers in the structure is supported by the fact that the productive causative marker and the causative verbal suffix have the same morphological form, namely both are realized at PF as *-t-*. Consider the following examples:

(10)   a. *Anaj*   *pinaljoszy*   *sajka-**t**-iz.*

анай   пиналъёсты   сайка-т-йз.

mother.NOM   children.NOM   wake.up-CAUS-PST.3SG

'The mother woke up the children.'

b. Sasha   Mashajez   gozhtetez   gozhty-t-iz.

Саша   Машаез   гожтэтэз   гожты-т-йз

Sasha.NOM Masha.ACC letter.ACC   write-CAUS-PST.3SG

'Sasha made Masha write the letter.'

This is not so surprising. As it was mentioned in Chapter 3 (Factitive Causatives), both suffixes go back to the same suffix: the Proto-Uralic *-tt-* or *-t-*.

It is interesting to see that in Udmurt it is possible for the two Causes to be present in the same derivation, as illustrated in (11).

(11) Emjas'   *anajez*   *pinaljosty*   *sajka-ty-t-iz*
      Эмъясь   анаез   пиналъёсты   сайка-ты-т-йз
      Doctor.NOM   mother.ACC   children.ACC   wake.up-CAUS-CAUS-PST.3SG
      'The doctor made the mother wake up the children.'

5.2.3.3   Agentive feature of the causer

There is a further difference between the two Cause heads, too. The Voice that dominates the Cause head of lexical causatives can have a [±agentive] feature, while the Voice head that dominates the Cause head of factitives can only have a [+agentive] feature.

Let us consider the following examples:

(12) a. *Anaj*   *sajkatiz*   *pinaljosty*   agent
         Анай   сайкатӥз   пиналъёсты
         mother.NOM   wake.up.PST.3SG child.PL.ACC
         'The mother woke up the children.'

      b. *Gudyrjaem*   *sajkatiz*   *pinaljosty*   non-agent
         Гудыръяем   сайкатӥз   пиналъёсты
         thunder.NOM   wake.up.PST.3SG child.PL.ACC
         'The thunder woke up the children.'

      c. *Sasha*   *Masha-jez*   *pinal-ez*   *babyty-t-iz.*
         Саша   Маша-ез   пинал-эз   бабыты-т-йз
         Sasha.NOM   Masha-ACC   baby-ACC   rock.to.sleep-CAUS-PST.3SG
         'Sasha had Masha rock the baby sleep.'

      d. **Kyrzan*   *Masha-jez*   *pinal-ez*   *babyty-t-iz.*
         *Кырӟан   Маша-ез   пинал-эз   бабыты-т-йз
         Sasha.NOM   Masha-ACC   baby-ACC   rock.to.sleep-CAUS-PST.3SG
         'Sasha had Masha rock the baby sleep.'

What is clearl from the examples is that while the Cause head selecting a root or a VP in the sense of Pylkkänen (2002, 2008) (traditionally called lexical causatives) can check both a [+agentive] or a [–agentive] feature (12a,b), the Cause head hosting the productive causative marker in factitives can only check a [+agentive] feature of the causer DP (12c). If the causer has a [–agentive] feature, the derivation leads to an ungrammatical sentence (12d).

In the proposal put forth in this dissertation, this difference in the agentive feature of the causer argument is not connected to the similarity/difference between the Cause heads inside and outside the first phase. Instead, this phenomenon has to do with the Voice head. The Voice head merged to the first phase Cause head can check either a [+agentive] or a [–agentive] feature. The Voice head outside the first phase is able to check only a [+agentive] feature, however. Evidence for this also comes from the fact that periphrastic causatives are not able to check a [–agentive] feature in Udmurt either.

(13) *Töl   pinaljos-ty   sajkany   lez'iz.*
    *Тöл   пиналъёс-ты   сайка-ны   лэзиз
    wind.NOM   kids-ACC   wake.up-INF let.PST.3SG
    '*The wind let the kids wake up.'

5.3   Final remarks

As we can see, there are many interesting and unsolved problems even in such a narrow topic of Udmurt syntax as causative constructions. I do hope that this thesis could be a starting point for futher investigations on topics such as differences between passives, half-passives and non-causative verb formations of Udmurt, the development of the *-ez/jez* suffix from a 3[rd] person singular possessive marker to an Accusative case suffix, Exceptional Case Marking constructions versus object control constructions in Udmurt, and many others which are invisible for us at this moment.

APPENDIX

Small Clauses in Udmurt

Non-verbal predicates in Udmurt[89]

Small Clauses (SCs) are minimal subject-predicate units in the syntax. They are illustrated with the following examples from English (1) and Finnish (2):[90]

(1)   a. *Carroll named his heroine Alice*.   Naming verb

  b. *John made Peter silly.*   ECM

                                        (Matushanky 2012:5)

(2)   a. *Me   kutsu-mme   William Gatesi-a   Billi-ksi*.   Naming verb

    we.NOM call-PRS.1PL   William Gates-PART Billy-TRS

    'We call William Gates Billy.'

  b. *Hän   teki   Pekan   iloiseksi*.   ECM

    she/he.NOM   make.PST.3SG   Pekka.ACC happy.TRS

    'She/he made Pekka happy.'

                                        (Matushansky 2012:9)

Udmurt, similarly to the other Uralic languages, is a copula-drop language. The copula is not overtly present in present tense indicatives with nominal (3a-c) and adjectival (4a-c) predicates:[91]

(3)   a. *Mon   emjas'*

    Мон   эмъясь.

    I.NOM   doctor.NOM

    'I am a doctor.'

---

[89]   I thank Veronika Hegedűs for the conversations about primary and secondary predications.

[90]   The notion of Small Clause stands for a subject-predicate structure lacking tense (Den Dikken 2006).

[91]   It is important to note that although Udmurt is a pro-drop language, pronominal subjects cannot be dropped in sentences with non-verbal predicates :

  (i) **pro* peres'

b. *Ton   emjas'*

Тон   эмъясь

you.NOM   doctor.NOM

'You are a doctor.'

c. *So   emjas'*

Со   эмъясь

she/he.NOM   doctor.NOM

'He is a doctor.'

(4)   a. *Mon   peres'*

Мон   пересь

I.NOM   old.NOM

'I am old.'

b. *Ton   peres'*

Тон   пересь

you.NOM   old.NOM

'You are old.'

c. *So   peres'*

Со   пересь

She/he   old.NOM

'He is old.'

However, there are two copulas in Udmurt: *van'* 'to be' and *luyny* 'to become'. The distribution and the morphological properties of the two copulas are different : *van'* 'to be' does not agree with the subject and it appears only in past tense (5), while *luyny* 'to become' agrees in person and number with the subject and can occur in all tenses (6):

(5) a. *Mon   emjas'   val.*[92]

      Мон   эмъясь   вал

      1SG   doctor.NOM   be.PST

      'I was a doctor.'

   b. *Ton   emjas'   val.*

      Тон   эмъясь   вал

      2SG   doctor.NOM   be.PST

      'You were a doctor.'

   c. *So   emjas'   val.*

      Со   эмъясь   вал

      3SG   doctor.NOM   be.PST

      'She/he was a doctor.'

(6) a. *Mon   emjas'   luo.*

      Мон   эмъясь   луо

      1SG   doctor.NOM   become.FUT.1SG

      'I will become a doctor.'

   b. *Mon   emjas'   lui.*

      Мон   эмъясь   луи

      1SG   doctor.NOM   become.PST.1SG

      'I became a doctor.'

Similarly to Hungarian, the copula is covert in Udmurt specificational sentences (7a-b), but contrary to Hungarian, it is covert in all persons (7b):

(7) a. *Mynam   samoj   umoj   eshe   Ivan.*

      Мынам   самой   умой   эше   Иван.

      1SG.GEN   most   good   friend.1SG   Ivan.NOM

      'My best friend is Ivan.'

---

[92] *Val* is the past form of the existential verb *van'*.

b. *Mon   kivaltys'.*

    Мон   кивалтӥсь

    1SG   director.NOM

    'I am the director.'

Unlike in predicational and specificational sentences, the appearance of the copula *van'* 'to be' is obligatory in existential sentences, regardless of tense:

(7)   *Inmar   van'.*

        Инмар   вань

        God.NOM   be.PRS

        'There is a God.'

There is a difference between the adjectival predicate and the nominal predicate in primary predications. APs obligatorily agree with the subject in number. Number agreement on NPs, on the other hand, seems to be subject to idiolectal variation, because not all native speakers produce number-agreement on the NP. Some informants prefer to use the nominal plural marker on predicate NPs instead:

(8)   a. *Mon emjas'.*

        1SG   doctor.NOM

        'I am a doctor.'

    b. *Mi   emjas'-jos.*

        1PL   doctor-PL

        'We are doctors.'

The singular is a default number and is always unmarked in Udmurt. AP predicates, however, have a special plural marker. This does not appear on attributive APs.

(9)   a. *Mon   peres'.*

          Мон   пересь

          1SG   old.NOM

          'I am old.'

     b. *Mi   peres'-es'.*

          Ми   перес-есь

          1PL   old.PL

          'We are old.'

In Udmurt we can find the following secondary predications, following the classification of Matushansky (2012):

(10) a. *Mynym Sasha   **l'ek**   pote.*   raising, stative

          Мыным Саша   лек   потэ.

          I.DAT   Sasha.NOM mad.NOM   come.out.PRS.3SG

          'Sasha seems mad (to me).'

     b. *Sasha   **l'ek**   luiz.*   raising, dynamic

          Саша   лек   луиз

          Sasha.NOM mad.NOM   become.PST.3SG

          'Sasha became mad.'

     c. *Sasha   Mashajez   **l'ek(en)**   lydja.*   ECM, stative

          Саша   Машаез   лек(ен)   лыдъя.

          Sasha.NOM Masha.ACC   mad.NOM   count.PRS.3SG

          'Sasha considered Masha mad.'

d. *Sasha*   *Mashajez*   ***l'ek***   *kariz.*   ECM, dynamic (causative)

Саша   Машаез   лек   кариз.

Sasha.NOM Masha.ACC   angry.NOM make.PST.3SG

'Sasha made Masha angry.'

e. *Kalyk*   *Sashajez*   *byrjiz*   ***prezident***   *shuisa.*   nomination

Калык   Сашаез   бырйиз   президент   шуыса

people.NOM   Sasha.ACC elect.PST.3SG   president.NOM that

'The people elected Sasha president.'

f. *Sasha*   *kochyshse*   ***Masha***   *nimaz.*   naming

Саша   коӵышсэ   Маша   нимаз

Sasha.NOM cat.SG.ACC   Masha.NOM   name.PST.3SG

'Sasha named his cat Masha.'

g. *Mi*   ***vozh(e)***   *(bujole)*   *bujamy*   *komnatajez.*   resultative

Ми   вож(е)   (буёлэ)   буямы   комнатаез

we.NOM green.ILL   colour.ILL paint.PST.1PL   room.ACC

'We painted the room green.'

h. *Sasha*   ***yl'yn***   *siiz*   *sil'ez* .   object depictive

Саша   ыльын   сииз   сйлез

Sasha.NOM raw.INST/INESS   eat.PAST.3SG   meat.ACC

'Sasha ate the meat raw.'

i. *Sasha*   *kudzem* ***jyryn***   *siiz*   *sil'ez.*   subject depictive

Саша   кудӟем йырын   сииз   сйлез.

Sasha.NOM drunk   head.INST/INESS   eat.PST.3SG meat.ACC

'Sasha ate the meat drunk.'

What is common to the examples in (11a-i) is that all of them contain an embedded small clause, but there is a difference in the case-pattern of the secondary predicates in the SCs. In (11a-f) the AP is marked with Nominative case (or it is unmarked), while in (11g-i), the AP is marked with ILL (11g) or with INST (11h-i). The situation is certainly not so surprising if the

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types of the SCs is taken into consideration. In the case of (11a-f) the SCs are selected by the matrix verb, they are in complement position, but in (11g-i) the SCs are adjuncts.

SUMMARY

The aim of this thesis was to investigate causative constructions containing lexical, syntactic and periphrastic causatives in the Udmurt language within the framework of *Distributed Morphology* (Halle & Maranzt 1994) and on the basis of Pylkkänen's (2002, 2008) theory of causatives, which assumes that VoiceP and CauseP are separate projections.

In the course of this thesis I proposed that traditionally called lexical, morphological and syntactic causatives are all formed in the syntax with a functional projection CauseP. This projection is responsible for the causing event, as argued by Pylkkänen (2002, 2008).

In the Udmurt language the head of this projection can be filled or it can be phonetically null. If it is filled then it is always filled with the morpheme *-t-*, which is the phonological realization of the causing event in this language. This means that the causative morpheme *-t-* appears either as a VP-selecting causative or a Phase- selecting causative (in the sense of Pylkkänen 2002, 2008), depending on the projection to which it is attached.

Chapter 2 investigates the causative/non-causative alternation in Udmurt. The main research questions concentrate on the morphological marking of the alternation and the internal structure of verbs taking part in the alternation.

I propose that the verbs are not derived from each other, instead, they are both formed from the same root. The causative verbs – if they are marked – always contain the causative morpheme *-t-* in their internal structure, and non-causative verbs, if they are marked – always have the *-s'k-* affix. The syntactic difference between the two verb types can be derived from their different internal structure. The causative variant has a Cause head that hosts the causative morpheme *-t-*, while the non-causative variant has only a Voice head that is merged to the verbal head.

In the case of lexical causatives, in the causative/non-causative alternation there are some non-causative verbs which allow an agentive causer as an adjunct. This proposerty has not been observed for non-causatives cross-linguistically. This special property of these verbs suggests that the structure of these verbs contains an extra layer (v_{trans}P) that can host the agent causer. However, as the non-causative morpheme *-s'k-* appears in Udmurt passive or half-passive constructions as well, I cannot exclude the possibility that in these constructions the verb form is not non-causative but rather half-passive.

Chapter 3 focuses on the productive, morphologically marked causative constructions. Factitive causatives in Udmurt show some special syntactic properties, namely the appearance

of the suffix *-ez/jez* both on the causee argument and on the theme argument, and the case-marking alternation of the causee argument. In the latter case the case-marking pattern of the causee is based on the degree of the control on the causee arugment. If the causative activity is direct then the causee bears ACC case, while if it is indirect then the causee is encoded with INST case.

The double appearance of the suffix *-ez/jez* also seems problematic at first sight, since in Udmurt double-objects are not possible in ditransitive constructions, which suggests that their appearance should be not possible with factitives either. To solve this puzzle, I proposed that the appearance of the suffix on the causee arugment has a strong connection to the associative use of the suffix in the language.

A syntactic approach is presented for these properties based on Pylkkänen (2002, 2008). In the syntactic structure of factitives in Udmurt, similarly to lexical causative verbs, the causing event is assossiated with the CauseP, and the factitive causative morpheme *-t-* occurs in the head position of this projection and the external argument, the causer, is introduced in the specifier position of VoiceP, in the sense of Katzer (1996). In addition to these crucial properties, this chapter investigates the domain and event properties of productive causatives, too.

Chapter 4 deals with periphrastic causatives. The syntactic properties of periphrastic causatives in Udmurt were illustrated with two causative verbs, *kosyny* 'to order' and *lezhyny* 'to let'. The complement clause selected by the two lexical causative verbs can be either non-finite or finite. The finite clauses are CPs and the non-finite complements of causative verbs are ECM constuctions. In the case of a non-finite complement, similarly to morphologically marked causatives, the causee argument is encoded with ACC case.

Chapter 5 summarizes the main research questions and results proposed in this work and contains the conclusions. This chapter also lays out the potential directions for further investigations.

MAGYAR NYELVŰ ÖSSZEFOGLALÓ

A disszertáció célja, hogy egy átfogó képet adjon a udmurt nyelv kauzatív szerkezeteiről, úgymint a lexikai, a szintetikus és az analitikus műveltetésről. A dolgozat egységes keretben vizsgálja a fenti szerkezeteket Miyagawa (1998) 'The same-component hypothesis' alapján, és amellett foglal állást, hogy a kauzatív szerkezetek egységesen a szintaxisban formálódnak.

A dolgozat a Osztott Morfológia (Halle & Marantz 1993, 1994) elméleti keretében íródott. A Disztribúciós Morfológia egységesen kezeli a lexikai és a szintaktikai kauzatívokat, és azt javasolja, hogy a Lexikon (Vocabulary) csak a gyököket, az inflexiós elemeket és a derivációs elemeket tárolja, a képzési folyamatok már a szintaxisban történnek.

A dolgozat másik, kauzatívokra vonatkozó elméleti kerete Pylkkänen (2002, 2008) elmélete, amelyek fő állítása, hogy a kauzatív esemény egy saját projekcióval rendelkezik (CauseP), amelyet külön kell választani a VoiceP-től, ami a külső argumentum bevezetésére szolgál.

A dolgozat vizsgálati anyagát saját gyűjtés adja ki, amelyet három terepmunka során, 2012-2013 között gyűjtöttem.

A dolgozat a következőképpen épül fel:

A dolgozat első fejezete igyekszik átfogó képet adni az udmurt nyelv legfontosabb morfológiai és szintaktikai tulajdonságairól, az elméleti keretről, amelyben a dolgozat készült, valamit a terminológiáról, amit a dolgozat használ.

A második fejezetben a lexikai kauzatív igék állnak a középpontban. A fejezet tárgya, hogy bemutassa, milyen morfológiai és szintaktikai tulajdonságokkal rendelkeznek azok az igék, amelyek részt vesznek a kauzatív/nem-kauzatív alternációban.

(1) a. *Pinaljos*　　　*sajka-zy*.　　　　　　　　　　　　nem-kauzatív
　　　　Пиналъёс　　　сайка-зы
　　　　gyerek.PL.NOM　felébred-PST.3PL
　　　　'A gyerekek felébredtek.'

　　　b. *Anaj*　*pinaljosyz*　　　　*sajka-t-iz*.　　　　　kauzatív
　　　　Анай　　пиналъёсыз　　　сайка-т-йз.
　　　　anya.NOM　gyerek.PL.ACC.3SG　félébred-CAUS-PST.3SG
　　　　'Az anya felébresztette a gyerekeket.'

A fejezetben bemutatott adatok, és elméleti elemzésük eredménye, hogy az udmurtban a nem-kauzatív igék, ha morfológiailag jelöltek, akkor minden esetben a -*s'k*- morfémával jelöltek, míg a kauzatív igék pedig a -*t*- kauzatív igeképzővel keletkeznek. Szintaktikai szerkezetében is eltér egymástól a két típus, a nem-kauzatív igék szerkezetében az igei kategória fölött a VoiceP helyezkedik el, míg a kauzatív igék tartalmaznak egy extra projekciót, a CauseP-t, ami a kauzatív esemény bevezetésért felelős. A dolgozat amellett érvel, hogy a lexikai műveltető igék igei szelektálók Pylkkänen (2002, 2008) terminológiája szerint.

A harmadik fejezetben a faktitív műveltetést mutatja be a dolgozat. A faktitív műveltetés az udmurt nyelvben a -*t*- produktív műveltető morfémával történik.

(2)   a. *Masha   kńiga-jez   lydzh-iz.*
        Маша   книга-ез   лыдӟ-из
        Mása.NOM   könyv-ACC olvas-PST.3SG
        'Mása elolvasta a könyvet.'

      b. *Masha   Sasha-jez   kńiga-jez   lydzhy-t-iz.*
        Маша   Саша-ез   книга-ез   лыдӟы-т-йз
        Mása.NOM   Szása-ACC könyv-ACC olvas-CAUS-PST.3SG
        'Mása elolvastatta Szásával a könyvet.'

A tranzitív alapú faktitív műveltetés néhány sajátos szintaktikai tulajdonsággal rendelkezik, i) kettős akkuzatívusz megjelenése, ii) a tárgyi esetjelölés neutralizációja, iii) az argumentum szerkezet rögzülése, iv) eset-alternáció a műveltetett argumentum jelölésében. Szintaktikailag a faktitív műveltetés – hasonlóan a lexikai műveltetéshez – a CauseP projekcióval vezetődik be a szerkezetbe, amire ráépül a VoiceP, ami a műveltető argumentumot, mint külső argumentumot vezeti be a szerkezetbe. Pylkkänen (2002, 2008) rendszere szerint a faktitívok minden esetben úgynevezett fázis-szelektáló kauzatívok.

A negyedik fejezet foglalkozik az analikus műveltetéssel. A fejezet két kauzatív segédigét, a 'parancsol' és a 'hagy' igét és a hozzájuk kapcsolódó szerkezeteket mutatja be.

(3)   a. *Masha   Sasha-jez   kńiga-jez   lydzhyny   kosiz.*
        Маша   Саша-ез   книга-ез   лыдӟыны косӥз.
        Mása.NOM   Sásza.ACC könyv.ACC olvas.INF   parancsol.PST.3SG
        'Mása megparancsolta Szásának, hogy olvassa el a könyvet.'

b. *Masha*   *Sasha-jez* *kńiga-jez* *lydzhyny* *lez'iz.*

Маша   Сашаез   книгаез   лыдӟыны лэзиз.

Mása.NOM   Szása.ACC könyv.ACC olvas.INF   enged.PST.3SG

'Mása engedte Szásának, hogy elolvassa a könyvet.'

Az udmurtban mindkét ige felvehet véges és nem-véges alárendelt tagmondatot, mint komplementumot. A véges alárendelésben az ige kötőmódba kerül, míg a nem-véges szerkezetben az ige infinitivuszi alakja használatos. Számos teszt alkalmazásával a fejezet amellett foglal állást, hogy a nem-véges szerkezetek úgynevezett Kivételes Eset Adó (Exeptional Case Marking) szerkezetek. A műveltetett argumentum ezekben a szerkezetekben akkuzatívuszi esettel van ellátva. Szintaktikailag mindkét szerkezet esetében a főmondati részben helyezkednek el a kauzatív segédigék egy v$_{cause}$ projekcióban, és attól függően, hogy véges vagy nem-véges alárendelt tagmondat-e a komplementumuk, véges esetében CP-t, míg nem-véges esetében TP-t szelektálnak. Pylkkänen (2002, 2008) elméletében a kauzatív segédigék minden esetében fázis-szelektálók, ami az udmurt esetében véges alárendelésnél igaznak bizonyul, mert a CP-k fázisok, de nem-véges alárendelés esetében kérdéses, mert a TP nem tekinthető fázisnak.

A dolgozatot a végkövetkeztetések zárják.

A dolgozat a kauzatívok bemutatása és elemzése mellett igyekezett megvizsgálni a műveltetésben mindhárom fő fejezetben elkerülő *–ez/jez* morféma funkcióját az udmurt nyelvben. A végső következtetés a morfémát illetően, hogy az *-ez/jez* szuffixum akkor jelenik meg, amikor valamilyen asszociációs viszonyba kerül a mondatban két entitás.

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